

TM

CIVILIZATION

STRATEGIES AND SECRETS

SECOND EDITION

Jason R. Rich



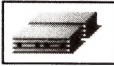
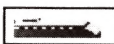
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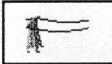
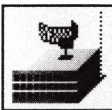
GET A SLEW OF TIPS AND TRICKS
TO HELP YOU IMPROVE YOUR SCORE
EACH TIME YOU PLAY

INCLUDES COMPLETE COVERAGE
OF BOTH THE WINDOWS AND DOS
VERSIONS OF CIVILIZATION



CITY IMPROVEMENTS

DOS Icon	Windows Icon	Improvement Name	Resource Cost	Maintenance Cost (per turn)	Advance Required
		Aqueduct	120	\$2	Construction
		Bank	120	\$3	Banking and Marketplace
		Barracks	Varies	\$0	None
		Cathedral	160	\$3	Religion
		City Walls	120	\$2	Masonry
		Colosseum	100	\$4	Construction
		Courthouse	80	\$1	Code of Laws
		Factory	200	\$4	Industrialization
		Granary	60	\$1	Pottery
		Hydro Plant	240	\$4	Electronics
		Library	80	\$1	Writing
		Manufacturing Plant	320	\$6	Robotics
		Marketplace	80	\$1	Currency
		Mass Transit	160	\$4	Mass Production

DOS Icon	Windows Icon	Improvement Name	Resource Cost	Maintenance Cost (per turn)	Advance Required
		Nuclear Plant	160	\$2	Nuclear Power
[appearance varies]		Palace	200	\$0	Masonry
		Power Plant	160	\$4	Refining
		Recycling Center	200	\$2	Recycling
		SDI Defense	200	\$4	Superconductor
		Temple	40	\$1	Ceremonial Burial
		University	160	\$3	Library

SPACESHIP CONSTRUCTION

Unit Name	Resource Cost	Advance Required
Structure	80 each	Space Flight
Component	160 each	Plastics
Propulsion		
Fuel		
Module	320 each	Robotics
Habitation		
Life Support		
Solar Panels		

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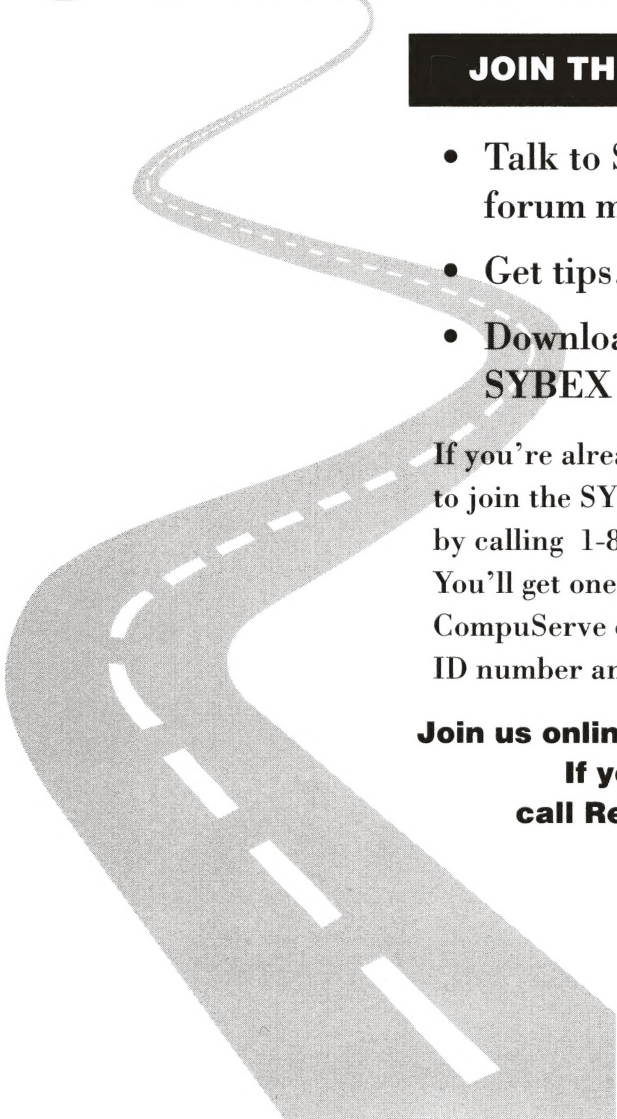


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SECOND EDITION

Jason R. Rich



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Civilization is about creating and managing people, so it's only fitting that I mention Victor and Lois Rich, my parents, who created me and my younger sister Melissa. (While I spend my time playing computer and video games, Melissa has a "real job" working long hours at a bank—ha ha!) Thanks also to Mark Giordani and Ellen Bromfield, for their long-time friendship and endless support.

While computer games are fun, it's my family and friends that make life worth living, and no matter how detailed the simulation, no computer could recreate the significance of these people in my life.

Jason R. Rich

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INTRODUCTION

OK, so you own a personal computer and you were looking for a new way to entertain yourself with it, so you purchased some entertainment software. Out of all the games and simulations currently on the market, you selected Sid Meier's Civilization. Perhaps it was the game's packaging that caught your eye, or maybe you heard about the game from a friend or associate. Whatever the reason, you'll soon discover that you have made an excellent decision.

Unlike many computer games and entertainment packages, Civilization is strategy-based. Civilization contains no fast-paced action, so it does not require lightning reflexes. Instead, this game demands that you think and plan as you take part in simulations that are affected by each choice you make.

WHAT THIS BOOK CONTAINS

Civilization Strategies & Secrets is intended to be your guide as you invent or rewrite history. Chapters 1 through 6 provide an introduction and general overview of the game, including information on how to install Civilization, how to interact with the game's unique user interfaces in both the DOS and Windows versions, how to manipulate the game screens, and how to begin a game. Novices will find the sample simulation in Chapter 7 invaluable, and more experienced players can learn from Chapter 8, which provides detailed winning strategies culled from experts who have posted their theories on the various on-line Civilization forums.

You can also use this book as an ongoing reference. The charts and diagrams in Chapter 9 will guide you through the prerequisites to obtaining knowledge that leads to your civilization's ability to build or steal Wonders of the World and other winning elements of the game. Chapter 10 shows you some built-in "cheats," Chapter 11 lists Civilization's keyboard commands, and Chapter 12 explains the game's complicated scoring system.

Appendix A offers interviews with Sid Meier, the renowned creator of Civilization, and William Denman, Jr., president and chief engineer of ShadowMasters, the company that adapted Civilization to the Windows format. Finally, Appendix B discusses a few "bugs" and other problems that sometimes occur with the Civilization software and how to prevent or fix them.



WHO SHOULD USE THIS BOOK

MicroProse Software currently offers versions of this game for a variety of computer platforms. *Civilization Strategies & Secrets* was written mainly for users of the PC DOS and Windows versions of the game; however, most of the information (especially the game overview, tips, sample strategies, and reference charts) pertain to all versions currently available.

SPECIAL FEATURES OF THIS BOOK

Civilization is a highly detailed and somewhat complex game, but this book will give you a quick and easy understanding of the game's operation. As you read *Civilization Strategies & Secrets*, notice the special Note, Tip, and Warning boxes like the one shown here. These boxes are designed to attract your attention to important pieces of information pertaining directly to the game. Notes contain cross-references, special game techniques, or practical hints for operating the software; Tips contain specific strategies to help you win Civilization; and Warnings alert you to potential problems—things to watch out for while playing Civilization.

The icons shown here indicate that a section of this book pertains to just the DOS or just the Windows version of Civilization.

The special notes and icons, combined with plenty of section headings and graphic screen shots taken from the game itself, should allow you to quickly obtain the information you need and want.

Every effort has been taken to ensure that *Civilization Strategies & Secrets* is the most detailed, easy-to-understand, and complete resource about Civilization possible. So whether you're a first-time player or someone who has already invested a considerable amount of time playing this game, you will find the information within this book extremely useful.

NOTE

For a general overview of Civilization, read Chapter 1, "Introducing Civilization."

DOS**WINDOWS**

**INTRODUCING
CIVILIZATION**

O N E



O N E

Have you ever gotten so involved in a game of Monopoly that it seemed almost real? Monopoly is hardly realistic, but it is easy to become engrossed in the excitement of wheeling and dealing while you buy and sell real estate for hours.

Civilization, the game from MicroProse Software, will capture your imagination. Instead of buying and selling real estate, your goal in Civilization is to take a small nomadic tribe of people and do whatever is necessary to expand them into a thriving, space-traveling society. Civilization is not a flashy, action-packed game, nor is it a military shoot-'em-up game. (But you will be forced to protect your people and perhaps enter small battles or even all-out wars.) Civilization is a graphics-based, role-playing simulation game—very realistic and highly detailed.

YOUR ROLE IN BUILDING A CIVILIZATION

From the moment the game begins, you will be asked to make decisions that will have ramifications years later. Everything in Civilization is somehow connected—just as it is in real life—and has a cause-and-effect relationship. For example, your tribe of settlers must discover the alphabet before becoming literate. Once the population is literate, your people can learn about astronomy, which is the first step on the path toward space exploration. Literacy also allows for the opportunity to build a great library and opens the door to developing dozens of other City Improvements (a term which will be explained later in this book).

In Civilization, you must build and control your empire as it comes into contact with other civilizations as well as with small tribes of barbarians. You could find yourself at war with Alexander the Great or signing some sort of treaty with Napoleon or Caesar. Perhaps you will trade knowledge with Ramses. Just as the game's package suggests, in



Sid Meier's Civilization you must "Build An Empire To Stand The Test Of Time. The action is simulated, but the excitement is real!"

From the time your civilization is created (around 4000 B.C.), you are the ruler and decision maker, although you will have Advisors who will offer you suggestions. In the early stages of the game, your job is relatively straightforward. The decisions to be made will be obvious; however, once your civilization expands, you must keep the technological developments and City Improvements moving forward, maintain your military, feed your people, and manage the government and its foreign affairs. These are just a few of the responsibilities that will require you to make choices that will have a direct impact on your civilization's evolution. The key to your civilization's survival is to successfully manage your cities, keep your population happy (or at least content), and make decisions that will benefit your people in both the long term and the short.

CIVILIZATION SIMULATES HISTORICAL EVENTS

Civilization is a *simulation*—but what *is* a simulation? In this case, a simulation is a computer-generated scenario that takes into account a vast amount of fact-based historical information in order to mirror reality (somewhat). A computer simulation is interactive and open-ended, which means there is no right or wrong direction in which to proceed. There are also very few set rules.

In an arcade game, you must beat one skill level before proceeding to the next, but a simulation has a much less predetermined structure. A simulation is a *model*—a representation or replication of something. Pilots use flight simulators to accurately replicate flying airplanes, just as the military uses computer simulations for training. In Civilization, the computer is used to simulate world history. The computer is programmed with an extensive list of cause-and-effect scenarios. Depending on how you proceed and the decisions you make, the programming will automatically adapt your game experience.



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Introducing Civilization

Sid Meier, the creator of Civilization, has done extensive research into history to make this game as detailed and realistic as possible; however, as you proceed, your actions may cause your civilization to evolve in different directions than history did, which could lead your civilization to extreme prosperity or total destruction.

BUT HOW MUCH HISTORY DO YOU HAVE TO KNOW?

Yes, Civilization is based upon history; however, you don't need to be a history buff to really enjoy the game. In fact, even if you were bored to death in history class, hated reading the textbook, and dreaded those documentary films, you might become obsessed with this game once the civilization you create and manage starts to take shape. Of course, anything you remember from those history classes could come in handy, but historical information vital to playing Civilization is outlined within this book in a presumably more exciting fashion than your high school or college history textbook. After all, this is a game, so have fun!

THE LOOK AND FEEL OF CIVILIZATION

Civilization is primarily a graphics-based game; however, there is little on-screen action (meaning animated graphics). The simulation in Civilization is made up of several main information and map screens that allow you to control the "action" using simple keyboard and/or mouse commands. When using the Windows edition of the game, a mouse is required; it is also highly recommended for the DOS version, because it allows you to interact with the game a bit faster.

It will probably take you an hour or two to become fully acquainted with Civilization and to understand exactly what's happening as you take each turn. Playing the game itself can take between fifteen minutes

NOTE

See Chapter 2, "Installing Civilization—DOS Version," or Chapter 3, "Installing & Using Civilization—Windows Version," for more details about interacting with the game.



and fifteen hours or more, depending on how well-defined and organized your decisions and actions are; so make yourself comfortable at the keyboard and get ready to take on the responsibilities of a ruler.

CIVILIZATION: STRATEGIES AND SECRETS

Your goal is to help your civilization evolve from a small nomadic tribe into a major world power (by eliminating all rival civilizations or by colonizing space).

CIVILIZATION'S CREATOR SPEAKS

To get a better understanding of what this game is all about and what actually inspired its creation, check out the interview in Appendix A with Civilization's creator and producer, Sid Meier. Not only will you gain insight into the game, but you might also discover a few strategies for getting started.

GETTING OFF THE GROUND

Civilization offers several different pregame options, which include five major scenario choices:

- Start a New Game
- Load a Saved Game
- EARTH
- Customize World
- View Hall of Fame



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Introducing Civilization

From here, you must select a difficulty level. Difficulty levels are listed here from the most basic to the most advanced:

- Chieftain
- Warlord
- Prince
- King
- Emperor

NOTE

Each of these pregame options will be described in detail in Chapter 4, "Civilization Basics," which offers directions for getting your first civilization off the ground.

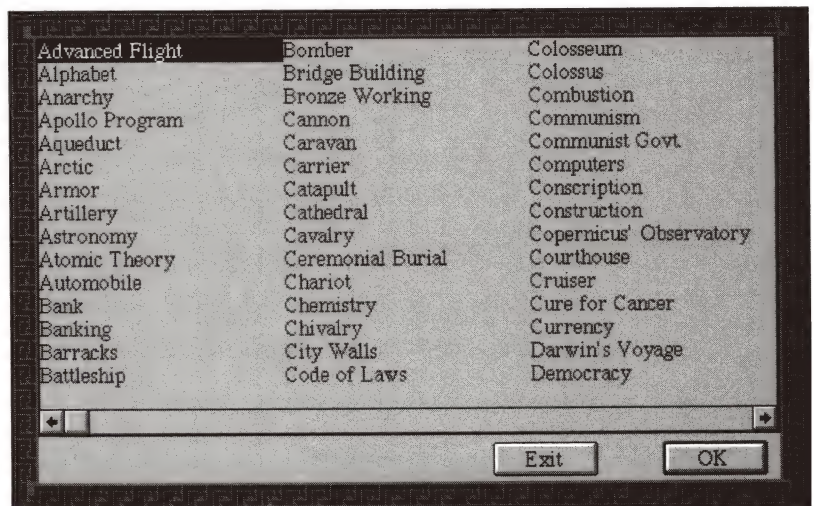
Needless to say, as a beginner, you'll want to start at the easiest level (as a Chieftain).

You will also have the opportunity to determine how many opponents (additional civilizations) the computer will control within your world—you can choose between three and seven additional civilizations. The fewer civilizations you choose, the greater your opportunity will be to expand your civilization peacefully before having to deal with foreign affairs (alliances, trade, and war).

WINNING CIVILIZATION

As you proceed, one important key to success is to always look at the big picture. For example, even if you're concentrating on allocating the right resources to defeat attacking barbarians, you must also continue to maintain your civilization through each turn and make the necessary advancements by planning for the future. Thus, you're going to have to accomplish multiple tasks at once or you will probably fail in the long run.

Included within the game is the on-screen "Civilopedia" (shown here), which, along





with your Advisors, will offer explanations and key information pertinent to your civilization. You can access the Civlopedia in the DOS version by holding down the Alt key and pressing C. In the Windows version, use the mouse to access the pull-down menu at the top of the Main Game screen.

SCORING CIVILIZATION

At the end of each game, a score will be displayed, which takes into account many criteria (described in Chapter 12, “High Scorin’ Civilization Fun”) in determining how well you managed your civilization.

CIVILIZATION COMMANDS KUDOS

Only a handful of computer games offer open-ended game play experience and detail equal to Civilization. When you see firsthand just how incredible this game is, you won’t be surprised to learn that Civilization has won the Software Publishers Association’s prestigious Critics’ Choice Award for “Best Consumer Product,” “Best Strategy Program,” and “Best Entertainment Program.”

MicroProse’s president and CEO, Bill Stealey, has commented, “In computer entertainment, these awards are like the Oscars. To be nominated for one is exciting. To be nominated in three categories is an honor. But to sweep the three categories in which we were nominated is phenomenal—like hitting a grand slam in the World Series!”

HAVE A WINNING REIGN

As you play Civilization, you will be experiencing one of the best simulation games the computer software industry has to offer. Your imagination, along with your ability to keep in mind the bigger picture, will play a key role in your success as the ruler of your civilization. Enjoy your reign, and good luck.

**INSTALLING
CIVILIZATION—
DOS VERSION**

T W O



Before you play Civilization, you must install and configure the program to your particular computer. This chapter will tell you how to install the DOS version of the software. (If you've purchased the Windows version of Civilization, please read this chapter and then refer to the next chapter.)

CIVILIZATION FOR THE PC

Civilization is now available for the Apple Macintosh and Commodore Amiga as well as for the PC (for DOS and Windows). A separate version is also under development (for release in late 1994) for the Super Nintendo Entertainment System. Basic game play in all of these versions is supposed to be identical, but the graphics will look somewhat different, depending on the version.

Civilization Strategies & Secrets offers strategies that can be used when playing the game on any of these systems; however, all screen shots and game play research has been done on the PC version. Also, in the installation section of this book, we're going to concentrate on the PC DOS and Windows versions.

WHAT YOU GET AND WHAT YOU NEED

You can purchase the PC DOS version of Civilization on either 5¹/₄" disks or 3¹/₂" disks—check the side panel of the packaging to make sure you're getting the correct disk size. (The Windows version is available only in 3¹/₂" disk size.) Civilization will run on an IBM PC, XT, or AT; a Tandy 1000; a Compaq; or a 100% IBM-compatible computer. The program requires at least 640K of RAM (random access memory).



MOUSE OR KEYBOARD OPTIONS

In DOS, the entire game can be controlled using just the keyboard; however, using a mouse is strongly recommended, as it gives you additional flexibility throughout the game. (The Windows version requires the use of a mouse.)

GRAPHICS CAPABILITIES

Civilization is compatible with these graphics controllers:

- IBM EGA
- IBM MCGA
- IBM VGA
- Tandy 1000 graphics system

If you're running the software in EGA mode, you must have at least 256K on the graphics card. The better the graphics capabilities of your computer, the more detailed each screen will be when you begin the simulation.

STIMULATE YOUR SENSES WITH SOUND

The human body has several senses—sight, smell, touch, taste, and hearing. You can't touch or taste a computer game (unless you literally take a "byte" out of your disks), and the computer doesn't have a smell, so you must depend on your other senses to get a sense of realism, while relying on your imagination to compensate for what's lacking.

In addition to a visual presentation (on the screen), Civilization provides for your ability to hear sounds and even background music in certain scenes.

Built-In Sound Capabilities

This software is compatible with a variety of sound boards, but you can choose instead to take advantage of your PC's built-in sound capabilities by selecting IBM Sounds at the appropriate menu when the game begins.



If you are using a Tandy computer with the Tandy music chip, you can use the Tandy Sounds option for improved sound and music. Civilization works well with the AdLib/Sound Blaster (or another compatible board), or the Roland MT-32 MIDI board. For other sound boards, you can also use a custom sound board driver, available from MicroProse software or the sound board's manufacturer.

Your computer has a built-in speaker, but its capabilities are limited. Thus, the folks at MicroProse have made Civilization compatible with several popular sound boards.

Sound Board Compatibility

Creative Labs offers several models of their popular sound boards, which have just about become standard within the PC industry. These sound boards are available from your local computer dealer.

The original Sound Blaster, which sells for approximately \$150, can deliver all of the audio power built into thousands of games and applications, including Civilization. This optional half-height card fits within your computer and offers an eleven-voice FM music synthesizer, 8-bit digitized voice channel input and output, a joystick port, a built-in power amplifier (so the board can connect directly to stereo headsets, speakers, or home entertainment/stereo systems), a MIDI interface, and the necessary software drivers to operate the board with your computer. The Sound Blaster will fit into any of your computer's 8-bit expansion slots.

If you really want to take advantage of your computer's sound capabilities, the Sound Blaster Pro Basic, which sells for approximately \$230, offers additional features, such as stereo audio output, a CD-ROM interface, multiple audio inputs, and enhanced bundled software. Creative Labs also offers the Sound Blaster Pro and the Sound Blaster 16 ASP sound boards.

Dozens of other companies manufacture less expensive yet totally compatible sound boards that will work with Civilization. If you want a board to work with Civilization, just be sure it is compatible with the Sound Blaster or Roland MT-32 MIDI boards—that will mean it's also compatible with Civilization.



RUNNING THE GAME FROM FLOPPY DISKS

It is possible to run Civilization from floppy disks; however, hard disk installation is recommended in order to avoid having to swap disks during game play. To run the software from

NOTE

When you see the command “press ↵” it means to press the Enter or Return key on your keyboard.

floppies, make copies of the original (distribution) disks using the DOS command Copy. You’ll need a set of floppies—one blank disk (either 5¼” or 3½”) for each of the distribution disks, plus an extra blank

disk on which to store your game data. After you have formatted your blank disks,

- 1** Insert the first Civilization distribution disk into drive A: and a blank disk into drive B:.
- 2** At the A:\ prompt, type **COPY A:*. * B:** and press ↵.

You’ll need to repeat this procedure to copy each of the game’s distribution disks onto a second set of floppies. When you’re ready to run the game,

- 1** Insert Civilization Disk #1 into disk drive A:.
- 2** At the A:\ prompt, type **CIV** and press ↵. The computer will run the game from the floppy disk.

During the installation and/or game play process, you may be asked to insert other Civilization disks, which will be requested by number. If you

WARNING

If your computer has a built-in Turbo mode, be sure that you have set your computer to operate at its normal speed before you run Civilization. If you don’t do this, the game may crash.

have two floppy disk drives, you can begin the game by inserting Disk #1 into drive A: and Disk #2 into drive B:. Do not remove the disks from the drives unless you are prompted to do so.



INSTALLING AND RUNNING THE GAME FROM A HARD DISK

If you have a hard disk in your computer, you can run the Install Civilization program found on Disk #1. To do this,

- 1** Place Disk #1 into your A: drive. (This assumes that A: is the appropriate drive for your disk size; if B: is the appropriate drive, use it and substitute B: for A: in these instructions.)
- 2** At the A:\ DOS prompt, type **INSTALLC** and press ↵.

Using its own internal batch files, the Civilization program will create a subdirectory called MPS (MicroProse Software), and then, within that directory, create a subdirectory called CIV, into which the game will be copied.

To run Civilization once the software is installed (it's pretty much a self-installing program),

- 1** At the C:\ prompt, type **CD \MPS** and press ↵.
- 2** A C:\MPS\ prompt will appear. Type **CIV** and press ↵ to run the program.

If your hard disk is named something other than C: (drive D:, E:, etc.), type **INSTALL**, followed immediately by the drive letter—for example, **INSTALLD**—and press ↵.

WARNING

Your computer should not be running any memory-resident programs or utilities when you install or run Civilization. If your computer is running other programs, they could conflict with Civilization and cause both programs to hang, or stop running.

TIP

If you try to install the game and an on-screen message appears indicating a lack of memory, try installing the game using EGA graphics instead of VGA graphics. (As you load the game, there is a selection screen that asks you to choose the graphics mode/card you wish.) Using the IBM Sounds option (as opposed to the Sound Blaster driver or another sound board driver) also requires less memory.



IF INSTALLC DOESN'T WORK...

Occasionally, INSTALLC acts up and won't do what it's supposed to. If this happens, you can manually do what INSTALLC automatically does by following these steps:

- 1** At the C:\ prompt, type **MD \MPS** and press ↵.
- 2** Now type **CD \MPS** and press ↵.
- 3** A C:\MPS\ prompt will appear. Type **MD \CIV** and press ↵.
- 4** Now type **CD \CIV** and press ↵.
- 5** A C:\MPS\CIV\ prompt will appear. Type **COPY A:*. *** and press ↵. This will load the files onto your hard drive.
- 6** To run the program, type **CIV** and press ↵.

CIVILIZATION'S COPY-PROTECTION SCHEME

For your convenience, the Civilization distribution disks are not copy-protected. This means that you can freely make backup copies for your own use. It does not mean that you can legally make copies for other people's use.

Pirating and distributing commercial software to others without written permission is illegal. To help protect itself from people copying and distributing illegal copies of the software, MicroProse has incorporated a password system into the DOS and Windows versions of the game.

Fifty turns or so after the game begins, the Civilization Quiz will appear on the screen. You will be asked a question, shown a graphic icon, and provided with page numbers. To continue playing the game, you must have the original Civilization owner's manual at your disposal. Follow these instructions:

- 1** Locate the pages in the manual that are described on the game screen, then match the graphic icon on the screen with the one found on the lower-left corner of the page in the manual. Two advances will be listed (in parentheses) near the graphic icon in the manual.



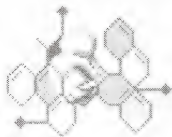
2 Back on the computer screen, there will be a list of choices. Match the advances described in the game's manual with the correct choices on the screen.

3 If the match is correct, the game will continue. If it's not, you'll be given a second chance to answer correctly. If you blow it twice, the computer will assume you are using an illegal copy of the game. In some versions of the game, the computer ends the simulation if you can't come up with the password. In others, the computer disbands all your military units and you have to rebuild them from scratch: you can keep on playing, but it's a lot more difficult. Either way, the simulation doesn't continue in its present form.

CIVILIZATION QUIZ

A usurper claims that you are not the rightful king! To prove you are of royal birth you must answer this question:

Which civilization advances are required to learn the advance pictured below.



Trade and The Republic
University and Medicine
Refining and Explosives
Mathematics and Electronics
Medicine and The Corporation
Automobile and The Corporation
Ceremonial Burial and Code of Laws
Chemistry and The Corporation

Pages 41-50

Answering the copy-protection question should take no more than thirty seconds if you have access to the game's manual.

UPGRADING CIVILIZATION

Since Civilization's introduction in late 1991, the folks at MicroProse Software have made a few upgrades to the software. The upgrades fix known bugs within the DOS version of the software. (Early versions of Civilization contained many bugs that caused the game to crash or hang.) The upgrades are available for free downloading from MicroProse's 24-hour BBS service or from commercial on-line services that offer a computer gaming forum, such as CompuServe (GO GAMBPUB) and America Online (keyword: MicroProse), Delphi (GameSig), Internet (address: 76004.2223@CompuServe.Com), MCI Mail (address: MicroProse), and Prodigy (Game Club).

**NOTE**

When you download an upgrade file such as CIVV05.ZIP, you'll need a decompression program to expand the compressed file. PKUNZIP, a popular decompression program, is available as shareware, meaning that you can obtain the program from a friend or electronic bulletin board, but to use the program beyond the initial trial period, you must register and pay a small fee for it. Other popular decompression programs, such as LHarc and Unzip, are in the public domain, meaning anyone can freely distribute and use them.

Follow the instructions for the decompression program you're using, and after decompression is complete, copy all of the .EXE files to C:\MPS\CIV on your hard disk, or to the main program disk if you're running from floppies.

To determine whether you have the most up-to-date version of Civilization, check with MicroProse Software's technical support people by calling or posting e-mail on CompuServe or the MicroProse BBS, or ask a knowledgeable sales clerk at the location where you purchased your computer software. Ask for the number of the most

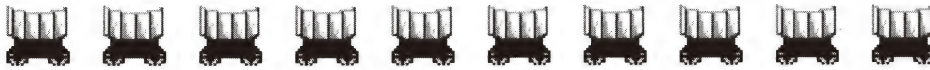
recent version and compare it to the version number listed on your game's setup title screen.

YOUR REIGN IS ABOUT TO BEGIN

Civilization is a complex game with many different variables—population management, military strategy, financial planning, and more. For a general overview of key aspects, read Chapters 4, 5, and 6. Then you should feel comfortable enough with the game to explore for yourself. Later chapters will provide you with hints for developing strategies and overcoming the various obstacles that your civilization may encounter.

**INSTALLING
AND USING
CIVILIZATION—
WINDOWS
VERSION**

T H R E E



T H R E E

Before you begin playing the Windows edition of Civilization, you must first install the software. This chapter provides the hardware requirements and the necessary information for installing the Civilization, Windows version software.

While the game play strategies for the DOS and Windows versions of Civilization are identical, the user interfaces for the two versions are different. The later portions of this chapter will explain some of the differences between the two versions in terms of how commands and game play options are used.

WHAT YOU GET AND WHAT YOU NEED

Windows Civilization comes on four 3½" disks. The hardware requirements for this software include an IBM PC or 100% compatible 386 SX/16 computer (or better) with at least 4 megabytes of RAM, one high density 3½" disk drive, and Windows (version 3.1 or higher). A sound card and external speakers (or headphones) are also recommended. The Windows version of Civilization is slower than the DOS version; therefore, the better computer you have, the faster the game speed will be. A 486 (or better) is highly recommended. Since Windows Civilization will only operate from the computer's hard disk, at least 8 megabytes of hard disk space must be available before installing the software. A mouse is also required.

THE SOUNDS AND SIGHTS OF WINDOWS CIVILIZATION

If you are already familiar with the DOS edition of the game and have decided to upgrade to the Windows version, one of the improvements you will notice is the game's sound. Windows Civilization is compatible with several popular sound cards, including Sound Blaster, Sound Blaster



Pro (or compatible), Mediavision Pro Audio Spectrum, Pro Audio Spectrum Plus, Pro Audio Spectrum 16, Thunderboard, and AdLib (or compatible). Any other sound board that has drivers for Microsoft Windows and that will play .WAV files should also work well with this software package.

You'll also see more detailed graphics in this Windows version. Thus, the look of the various units in the game is different; however, their capabilities and limitations remain basically the same. Windows Civilization also supports 256-color SVGA and 16-color VGA graphics.

INSTALLING AND RUNNING THE GAME FROM A HARD DISK

Windows Civilization includes an Install Program that works almost automatically. This program must be installed on the computer's hard disk before it can be played. To install the program, follow these steps:

- 1** Start Windows.
- 2** Once Windows has been loaded, insert Civilization Disk #1 into your computer's 3½" disk drive.
- 3** Use the mouse to access the File pull-down menu and choose the Run option.
- 4** The Run dialog box should now appear. Assuming your 3½" disk drive is considered the A drive, type **A:\SETUP** in the command line box and then click the mouse on the OK button. (Obviously, if your 3½" disk drive is the B drive, type **B:\SETUP** before clicking the OK button.)
- 5** The software will now begin loading. Follow the directions that appear on the screen. These directions will inform you when to swap the 3½" disks.



- 6** As the installation procedure continues, additional dialog boxes will appear and provide you with simple directions for how to proceed. The first dialog box to appear will ask for your approval before the software creates a subdirectory on your hard disk where the software will be placed. You can use the default subdirectory by clicking the mouse on the Continue button, or you can type in a new subdirectory path and name.



RUNNING THE SOFTWARE ONCE IT'S INSTALLED

Once the software is installed, Civilization will have its own program group and graphic icon within Windows. To begin running the program, load the Windows operating system (if you have just turned on the computer). If you're already in Windows, select the Civilization program group and click the mouse on the Civilization icon (shown here). The game's main title screen will appear within seconds.



WHAT'S NEW IN THE WINDOWS VERSION OF CIVILIZATION?

The Windows version of Civilization offers a totally new graphics interface that takes full advantage of the Windows operating system. There are of course some differences from the DOS version in the keyboard commands, but the major difference is in the way the screens are set up. The Main Game screen in DOS is made up of a single screen divided into several parts, but the same screen in Windows is divided into a series of separate windows that can be manipulated, moved, and resized using the mouse—in short, you can customize Windows Civilization the way you like it.



THE WINDOWS MAIN GAME SCREEN

The Civilization Main Game screen in Windows is made up of three different windows: the World Map (upper-left corner), the Status window (lower-left corner), and the Area Map (the largest window on the screen). The World Map graphically depicts the entire planet that has been explored by your empire. At the start of the game, it will appear as a black box. As you move units around and explore, the World Map will offer an overview.



The Status window offers text and graphics that reveal information about your civilization, including the date, the size of the population, the amount of funds in your treasury, and the current tax and

luxury rates. There are also a current science rate indicator and an environment indicator.

The Area Map provides an up-close and detailed look at a large land mass or continent. From this display, you can see cities, units, terrain types, and other graphically-depicted information.



Moving Around in Windows Civilization

The controls used to move around the Main Game screen (and the windows which comprise this screen) are slightly different from the DOS version of the software. Use the mouse to slide the horizontal and/or vertical scroll bars, which will in turn slide the entire Area Map upward, downward, left, or right. You can also use the mouse to point and click on a specific area within the tiny World Map window. When you do this, the large Area Map will



quickly center itself on the point you selected on the World Map.

Each window within Civilization can be closed by clicking the mouse on the tiny close box located in the upper-left corner of the window. To reopen a window that has been closed, you must access the Edit pull-down menu located at the top of the Main Game screen's Area Map. The large Area Map window can also be resized; however, the larger this map is, the more processing the computer will have to do between turns once the game begins.

TIP

Unfortunately, one of the biggest problems with Windows Civilization is its speed. To speed up the game a bit, keep the Area Map window small.

Accessing Menus

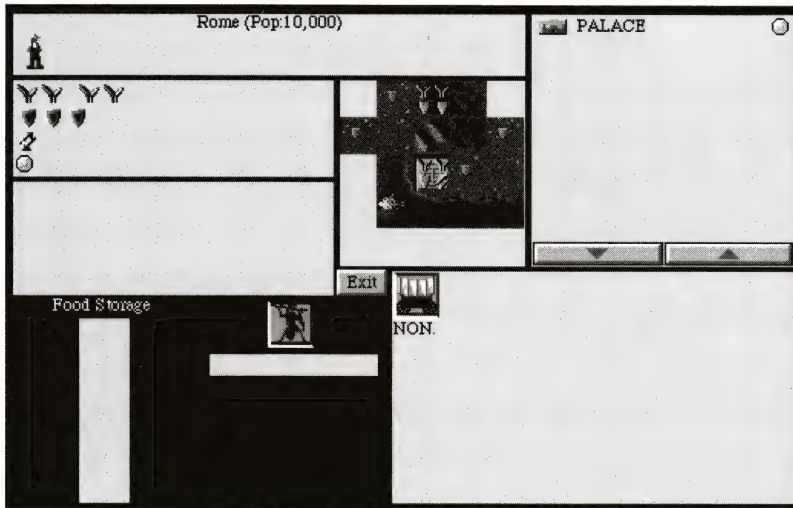
The Main Game screen menu bar is shown here. All menus that make up Windows Civilization can be accessed by using the mouse or by holding down the Alt button on the keyboard in conjunction with the single letter key



which corresponds to the command you wish to execute. (To access the File menu, for example, press Alt+F. To read information from the Civlopedia pull-down menu, press Alt+P.) Once an option is selected, you can accept your selection by clicking the mouse on the highlighted option, pressing ↵ on the keyboard, or clicking the mouse on the OK icon.

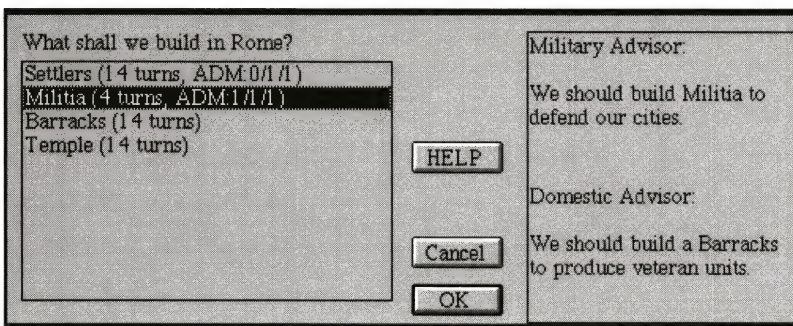
THE WINDOWS CITY SCREEN

Each city that you create will have its own City screen: one large window broken up into a variety of areas that contain information about your city. To reach a City screen from the Main Game screen, click the mouse on the specific city tile that you want to access; that city's City screen will appear. In Chapter 5, "Understanding the Game Screens," you'll discover how to use the mouse and/or keyboard to control the options offered from this window.



The Production window, located in the lower-center of the City screen, is the main window in the City screen. This window shows an icon indicating what production task—creating a unit, Wonder of the World, or City Improvement—your city is currently working on. (In this case, the city is working on creating a Militia unit.)

To change production tasks, click the mouse on the unit icon that is depicted. The pop-up window shown here will appear, offering you other options along with suggestions from your Advisors. As a simulation progresses and your empire earns additional knowledge, the number of possible options will increase.



MOVING UNITS

Once the game begins, one of your main tasks during each turn is to move the different types of units around the Area Map. This can be done using the mouse or the numerical keypad portion of the keyboard.

To move a unit with the mouse, place the cursor over one edge or corner of the unit. The cursor will change into an arrow and point in one of eight directions (up, down, left, right, diagonally up & left, up & right, down & left, or down & right). To change direction, move the cursor to a different edge or corner of the unit. When the arrow is pointing in the



direction you want the unit to move in, click the mouse button.

If you're using the numerical keypad on the keyboard, press one of the following keys to move a unit:

Key	Movement
1	Down & Left
2	Down
3	Down & Right
4	Left
6	Right
7	Up & Left
8	Up
9	Up & Right
[5]	[Not Used]

NOTE

If you're using the keyboard to move each active unit, you may have to wait for the unit to flash two or three times before your keyboard commands are executed.

DETERMINING TERRAIN

With Windows Civilization, you can immediately determine the type of terrain within a certain area (arctic, desert, forest, grassland, hills, jungle, mountains, ocean, plain, river, swamp, or tundra) by placing the mouse cursor over the area and clicking the right mouse button. Chapter 6, "The Elements of Civilization," will tell you why understanding the terrain is important.

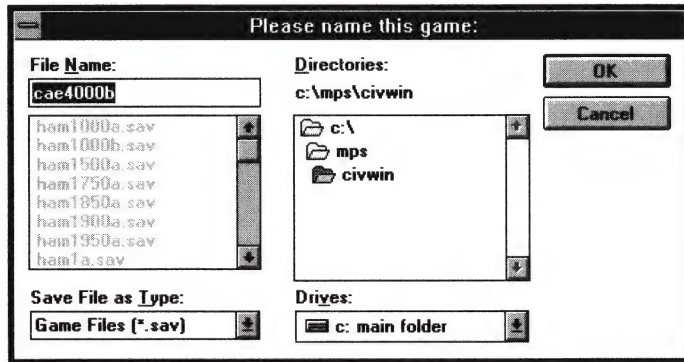
OTHER NEW WINDOWS FEATURES

There are many other small differences between the DOS and Windows versions of Civilization. Throughout this strategy guide, these changes will be described as they apply to the game elements or strategies being explained.



SAVING A SIMULATION AND RELOADING IT LATER

Just as in the DOS version of Civilization, you have the option of saving your simulation to disk so that you can reload it later and pick up where



you left off. You can set the software to automatically save your game data periodically, or you can perform a manual game save by accessing the File pull-down menu and choosing the Save Game option. (You can also use the keyboard-only command Ctrl+S.) You can save a simulation as often as you'd like, provided you have

enough available space on your computer's hard disk (or floppy disk). Each saved game requires between 15K and 50K of disk space.

When the Game Save option is selected, the pop-up window shown here appears. The software creates a tentative filename that includes ab-

TIP

When you reopen a saved game, the units are reset to full movement. This means that you can move all your units, save the game, restart it, and move them again (and again, and again...)—a very useful bug to exploit, though quite time-consuming.

brevisions for the leader's name and the current simulation date. You can click the mouse on the OK button to accept this filename or input an alternate filename. In the Windows version, you can save an unlimited number of games, provided you have enough disk space.

LOADING SIMULATIONS FROM DOS OR MACINTOSH

Simulations created on the DOS version of Civilization can be loaded and played on the Windows version. It is also possible to load simulations



created on the Macintosh version of the game (provided you use Apple File Exchange or a similar data conversion program).

YOUR REIGN IS ABOUT TO BEGIN

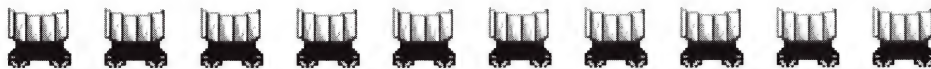
The future of your empire is in your hands. Once a simulation begins, every decision you make will have positive or negative repercussions, so be sure to think ahead.

Keep reading this book for more secrets of the game. Chapters 4, 5, and 6 provide a general overview of key aspects of Civilization. The later chapters include more detailed strategies and information that will help you overcome the various obstacles that your civilization may encounter.

CIVILIZATION BASICS

F O U R





F O U R

Now that the Civilization software is installed on your computer, it's time to start your simulation. If you're running the DOS version of the software from a hard disk, at the C:\MPS prompt, type **CIV**. Press ↵ and the simulation will run. Using the Windows version, load Windows, then double-click the mouse on the Civilization icon.

CIVILIZATION'S PREGAME OPTIONS (DOS VERSION ONLY)

Before the game actually begins, the DOS version of Civilization presents a series of menus that allow you to determine the graphic, sound, and mouse/keyboard drivers you will use to interact with the game.

SELECTING A GRAPHICS MODE

First, select the graphics mode under which Civilization will be running. The Graphics Driver menu appears just below the center of the game's title screen and provides you with four choices:

- VGA (256-color)
- MCGA (256-color)
- EGA (16-color)
- Tandy 1000 (16-color)

Enter the appropriate selection (based on your hardware configuration) and press ↵. If you are using a laptop or notebook computer with an LCD display, selecting EGA should

DOS





allow Civilization to operate correctly. For full-sized computers with color or monochrome monitors, make your selection based on the type of monitor and graphics card you are using.

SELECTING A SOUND MODE

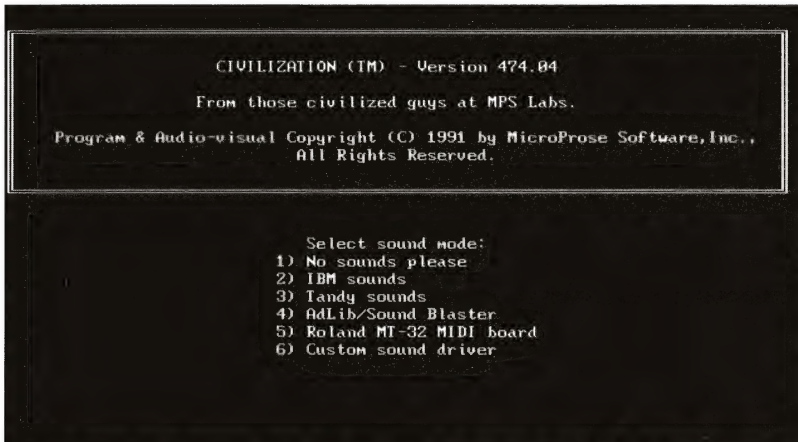
DOS

Next, you will be prompted to select the sound mode for the simulation. If you're going to be playing in an office situation, you'll probably want to select the "No sounds please" option so that you can play the game quietly. If you're an avid computer game player, you may have already invested in a sound board—a wonderful enhancement to any computer game system.

Civilization is compatible with the AdLib/Sound Blaster, which is probably the most popular optional sound board available. Civilization also

works with the Roland MT-32 MIDI board or can be modified to accept custom drivers. If you're going to be using a custom sound driver, check with the folks at MicroProse or the sound board's manufacturer to determine compatibility.

If you have not invested in a sound board, you'll probably want to select the IBM Sounds option, which takes advantage of your computer's built in speaker(s).



MOUSE PLAY OR KEYBOARD PLAY

DOS

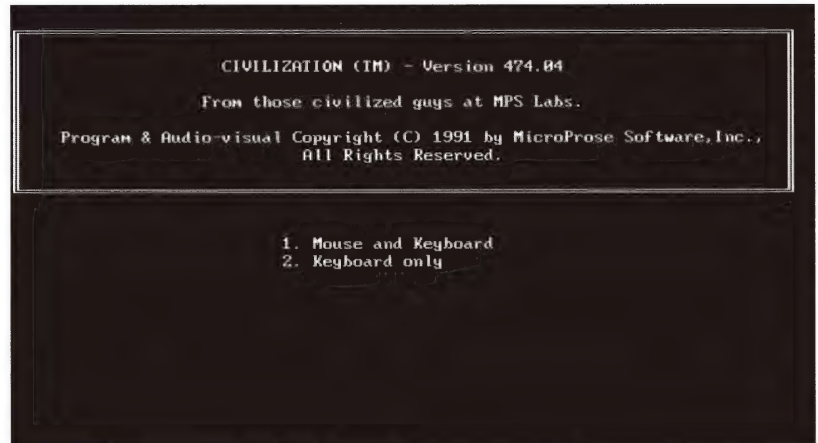
After you have made your selection from the Sound Options menu, the next option menu—the Mouse/Keyboard Driver menu—will appear,



asking you to define how you will be interacting with the game. This menu offers only two choices:

- 1** Mouse and Keyboard
- 2** Keyboard Only

Option 1, Mouse and Keyboard, should be selected if you're going to be using a mouse along with the computer keyboard (which is highly recommended, because the mouse allows you to interact faster and more easily with the game). Perhaps you're one of those PC owners who hasn't yet discovered why using a mouse is helpful, so you don't own one. No problem—either run to your local computer store and pick up a mouse or select option 2, Keyboard Only. Make your selection by pressing 1 or 2; it is not necessary to press ↵.



AUTOMATIC LOADING OF DRIVERS

Now Civilization will automatically load the appropriate drivers, which are special programming subroutines that allow Civilization to operate correctly with your computer hardware. The message "One Moment Please" should appear briefly on the computer screen. The simulation will begin soon after. As you are transported into a computer-generated world, the game screen will go blank, followed by a screen listing the game's copyright credits. Then the message "A MicroProse Presentation" will be displayed, followed by a list of the key people involved in the production of the game.

TIP

If you don't want to watch the game's credits, press the space bar and the main title screen will appear.



STARTING A SIMULATION

On the lower portion of the main title screen (Figure 4.1) is a menu that allows you to select the type of simulation with which you wish to experiment. The main options include

- Start a New Game
- Load a Saved Game
- [Play on] EARTH
- Customize World
- View Hall of Fame

TIP

In the DOS version, you can bypass this screen by pressing the appropriate key during the opening credits sequence. Press *N* for Start a New Game, *L* for Load a Saved Game, *E* for EARTH, and *C* for Customize World.



FIGURE 4.1 The main title screen menu in the DOS (left) and Windows (right) versions of Civilization

STARTING A NEW GAME

The Start a New Game option begins a new simulation—in the year 4000 B.C. on a world much like Earth. Unless you achieve your ultimate



goals—to conquer the world and/or colonize space—the game will conclude in the following years, depending on which skill level you choose:

Skill Level	Concluding Year
Chieftain	A.D. 2100
Warlord	A.D. 2080
Prince	A.D. 2060
King	A.D. 2040
Emperor	A.D. 2020

NOTE

We'll talk about choosing skill levels later in this chapter.

As you become good at Civilization, a typical “quick game” can take several hours to play, so you'll probably want to save the game, take a break, and continue playing at a later time. (Directions for saving the game data are outlined in Chapter 5, “Understanding the Game Screens.”)

NOTE

Chapter 7, “A Beginner's Tutorial,” demonstrates how to start a new game and provides an overview of Civilization.

RESUMING A SAVED GAME

The Load a Saved Game option can be used to recover a simulation that you have saved and stopped playing for a while. After you select Load a Saved Game, you will be asked to identify the disk drive on which your saved game data is stored. A menu will appear listing a number of saved games (or portions of games if you used AutoSave). The DOS version allows only ten saved games or portions of games, while the Windows version allows an unlimited number. Select the saved game (or portion of a game) you want to resume.

CHOOSING TO PLAY ON EARTH

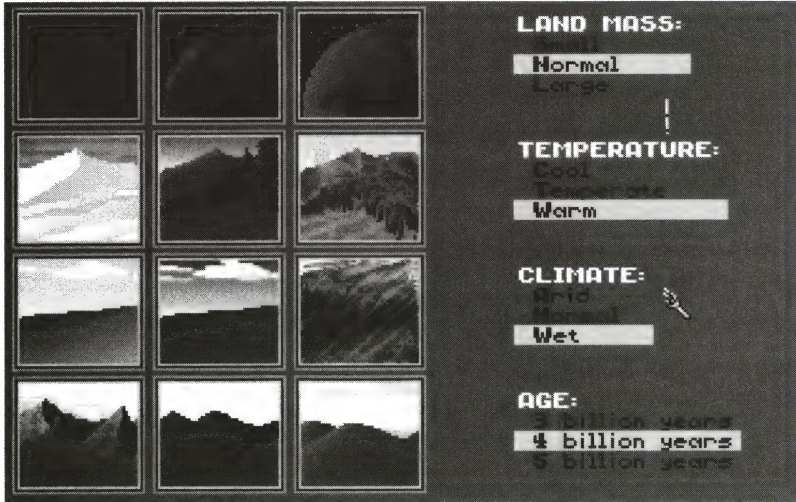
Selecting the [Play on] EARTH option from the title screen menu allows you to experience a simulation that takes place on the planet Earth. In this case, your adversaries will be located on their historically correct continents.



CUSTOMIZING YOUR WORLD

If you choose Customize World, you will have the opportunity to “play God” by creating your own planet from scratch. Before this simu-

lation begins, you must create the land mass (on-screen, of course), determine average temperatures, specify how much moisture is available, and choose a starting date from additional menus, as shown here (DOS version). The middle choice on each submenu is the one most similar to Earth. Keep in mind that the choices you make now will form a basis for how your simulation progresses. When you alter the climate of a continent, for ex-



ample, there are bound to be drastic changes in how the people on that continent evolve.

VIEWING THE CIVILIZATION HALL OF FAME

Civilization automatically stores the top five most prosperous civilizations that have been created by players. When View Hall of Fame is selected from the main menu, information about these top-ranked civilizations is displayed. After you view these historical records, press any key and the game's main menu will once again appear. The Hall of Fame is provided for your information only; you don't get to choose to play a Hall of Fame simulation but must set up your own.

CIVILIZATION'S STORY

Once you have defined the simulation you wish to play, the story behind Civilization is displayed on-screen. Like any epic adventure, this story begins, “In the beginning...” The story explains how the world was



created, then posts a job opening for you to fill—for the great leader of the civilization which is about to form, of course.

The story takes a few minutes to scroll through, so be patient. In the future, if you're comfortable tinkering with computer files, you can use your word processor or text editor to modify the DOS Civilization file called STORY.TXT and edit this story, making it a bit shorter or more to your liking.

DOS

MODIFYING TEXT FILES (DOS VERSION)

Just about any of the Civilization .TXT files (which contain the text you see during the game) can be modified. Before editing a .TXT file, however, you should first copy the existing file onto a blank disk so that you have a backup copy. Remember, too, that although you can change the text itself, you cannot change the formatting of the existing text or erase any of the file's syntax. If you do, the game may not be able to read the .TXT file correctly.

If, as ruler, you also want to play newspaper editor, you can edit the KING.TXT file, which contains the newspaper headlines you'll see throughout the game. Before editing this file, though, you should probably play the game for a while to determine exactly what each of the headlines means.

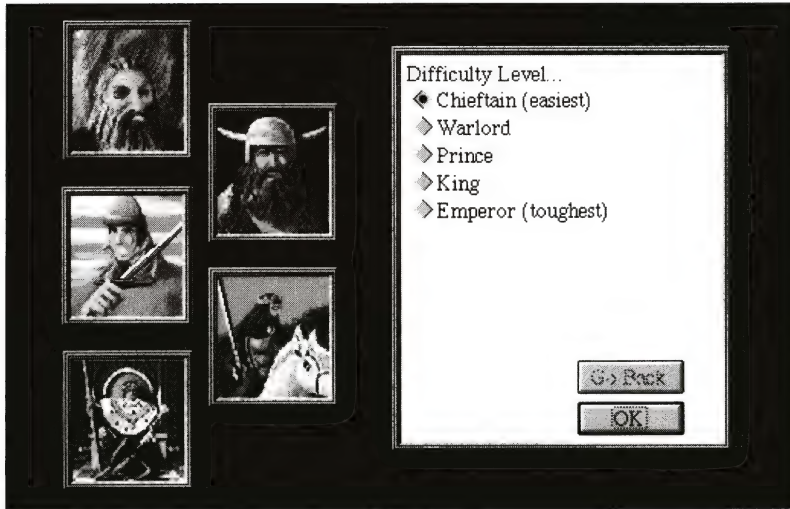
Another trick is to print a hard copy of the text files that make up the "Civlopedia" (which will be described in detail in Chapter 5, "Understanding the Game Screens"). This will make it easier to refer to the Civlopedia while playing the game. The .TXT files that make up the Civlopedia include BLURB0.TXT, BLURB1.TXT, and BLURB4.TXT.



SELECTING A SKILL LEVEL

After you have read the story about how the planet was created, you

must select the level of difficulty for the upcoming simulation: Chieftain (the easiest level), Warlord, Prince, King, or Emperor (the most difficult level). The Windows Difficulty Level screen is shown here.



The primary differences among levels involve how long it takes for advancements to occur and how long it takes to produce new units. (In Civilization, every citizen is a settler, military, or diplomatic "unit.")

Levels also differ in the ease

with which you can maintain the happiness of your people and avoid civil disorder. At levels lower than King, your opponents will not be evenly matched with you in capabilities, so your civilization will have the upper hand. Since you should be able to evolve more quickly, you'll have a small advantage.

You will definitely want to experience your first simulation as a **Chieftain**. At this level, you'll be smarter and stronger than your opponents. To help you even more, information windows will appear periodically throughout the game to offer you playing advice.

As a **Warlord**, you'll find that your rivals will be a bit more difficult to defeat and technology will take a bit longer to acquire. Opponents will be more skilled than those you encountered as a Chieftain, but you'll still have the advantage.

Just as you would expect, the **Prince** level is even more difficult than the Warlord level, but your opponents are still not evenly matched with your civilization, so you can have the upper hand.



Should you decide to experience a simulation as a **King**, you're going to have to work hard to keep your people happy. You'll also need to become a superior military planner when it comes to defeating your opponents, who will now be superior to you, giving them a slight advantage.

MicroProse reports that the game can be won at the **Emperor** level, but if you choose this option, your leadership skills will be put to the ultimate test as you attempt to keep everything moving forward in order to colonize space before your enemies attack and defeat your civilization.

SELECTING THE LEVEL OF COMPETITION

As your civilization expands, you will meet other civilizations and tribes, as well as barbarians—you're going to have to fight them or sign peace treaties to coexist on the planet. After selecting the skill level at which you'll play, you'll select the Level of Competition, which means determining the number of differing civilizations and tribes (between three and seven) you'll meet as your simulation progresses. The DOS Level of Competition screen is shown here.

If you choose a large number of civilizations, it doesn't necessarily mean that you will immediately be attacked from all sides by different enemies (although sudden attacks are always possible). It does mean, however, that as you expand, you'll meet your neighbors a bit faster, so you'll have to deal with them earlier in the game (maybe right at the start). Once you've progressed a bit, contact with other civilizations can give you advantages in the ability to open trade routes and develop allies. War isn't always necessary, nor is it always preferred. Civilization is not a military-based game; however, every civilization is constantly faced with the possibility of war.

During the game, you may have to make multiple decisions at once. For example, you may need to decide whether to expand your civilization by creating new cities or attacking others, or to make your existing



**TIP**

If you're torn between expanding your civilization and protecting your cities, always protect what already exists. If you expand too quickly, you won't be able to protect yourself against multiple attacks or sudden internal problems like civil unrest. Whenever possible, upgrade existing cities with new technological advances and maybe even a few luxuries.

civilization stronger from an internal standpoint. At the same time, you may need to decide between building a City Improvement, which will make your people happy, or pursuing new scientific knowledge, which will help advance your civilization.

CHOOSING YOUR TRIBE

Now choose which tribe you want to lead. If you chose the 3 Civilizations option from the Level of Competition menu, your choices for the tribe you lead will include

- Roman
- Babylonian
- German
- Russian
- Zulu
- French

If you chose the 7 Civilization option, you can add to your choices for the tribe you lead:

- Egyptian
- American
- Greek
- Indian
- Aztec
- Chinese
- English
- Mongol



From a game play standpoint, it doesn't matter which tribe you choose, unless you selected the EARTH game option, which places your tribe and your rival civilizations in their historically correct geographical locations.

CREATING A CUSTOMIZED TRIBE

In the Windows version of Civilization, you can choose one of the pre-defined tribes at the Pick Your Tribe window or you can select the Custom option and name your own tribe (see Figure 4.2). If you select the Custom tribe option, another window will appear asking you to type in the name of the tribe. When you're done, click on the OK button to continue.

NOTE

Although the DOS version does not feature a Custom tribe option on its Pick Your Tribe screen, you can accomplish the same thing by pressing Esc.

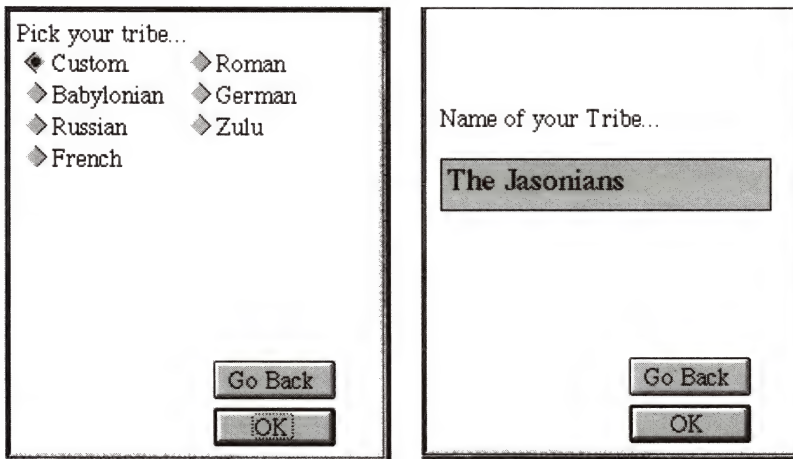


FIGURE 4.2 *Creating and naming a Custom tribe in Windows*



NAMING YOURSELF GREAT LEADER

Finally, a dialog box will appear where you must enter your name (or pseudonym), which can be up to fourteen characters long. If you choose

not to enter a name, the computer will provide you with a historical name that it feels is suitable.

THE MAIN GAME SCREEN

Once your name is identified, the Main Game screen (Figure 4.3) will appear. Your name will appear as the leader of the tribe you have selected. Be sure to note the technological advances your tribe already holds. This knowledge will be

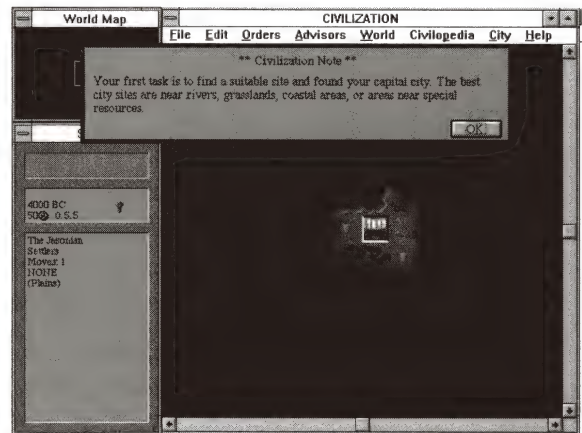
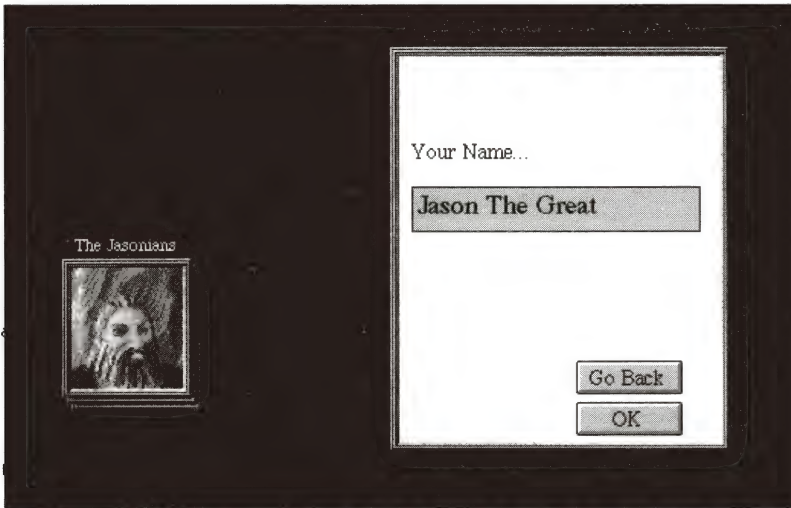


FIGURE 4.3 The Main Game screen in the DOS (left) and Windows (right) versions of the game



displayed before the simulation actually begins. You may want to check the reference charts in Chapter 9 of this book to determine the best tracks to follow in terms of your tribe's future advancements.

DEFINING SHORT-TERM GOALS

At the start of the game, you control a group of Settlers who are wandering in search of a location to settle in. Your immediate goals in the game are

- 1** To help your people form a capital city
- 2** To enable them to protect the city
- 3** To enable them to feed themselves

SELECTING THE LOCATION OF YOUR CAPITAL CITY

In your next decision, the most important one so far, you must choose an appropriate location for the capital city you'll be founding. In Civilization, geographical area has a major impact on your people's productivity and overall welfare. Just as in real life, a Civilization city must have some natural resources for agricultural and industrial growth, both in the short and long terms.

At first, you'll know little about the terrain around you. As you explore, the blackness on the screen and on the maps will slowly disappear.

When you are searching for a good location, use common sense. Rivers allow for easy irrigation, which means agriculture will be strong and, initially, your people will be fed. Grasslands are also good for agriculture. As you expand, you might want to look for hills to construct cities near—hills are excellent for mining, which leads to earning extra funds. Mountains offer good protection for cities.

NOTE

It is possible to convert squares of one type of land into another type of land (for example, forests can be converted into plains and grasslands can be converted into forests, depending on your needs), but this takes time and resources.



Determining the best site for your capital city may take a bit of exploring. But until your city is founded, your unprotected group of wandering

TIP

Always be on the lookout for graphic icons that symbolize natural resources, such as fish in the water or animals, gems, and minerals on land.

Settlers is vulnerable to attack. If, at the Level of Competition menu, you selected a large number of other civilizations, you can't spend a lot of time wandering around, or you may immediately encounter an invading enemy. If this happens, your civilization will crumble right away.

When playing at easier levels or with fewer other existing civilizations, take up to six or eight turns to explore the terrain and establish your capital city.

NOTE

If you're playing as a Chieftain, the easiest level, windows will appear offering suggestions for good locations to found your city.

At more difficult levels or when playing with many other existing civilizations, you'll want to form your capital city immediately.

Founding Your Capital City

Once you have found a perfect location for your capital city, you can immediately found your city or first make modifications to the area,

NOTE

If you accidentally found a city, press Esc and the command will undo itself.

such as altering the terrain type, building mines, and developing irrigation. The available options are listed in the Orders pull-down menu. To found your city, follow these steps:

- 1** Choose Found New City from the Orders pull-down menu at the top of the Main Game screen.
- 2** Press **B** on the keyboard or click the OK icon with your mouse.



To protect your city, use at least two Militia units. First, create the units by selecting the Change option in the City screen; then, as each unit is created, fortify it by choosing the Fortify option from the Orders pull-down menu.

NOTE

Later, you'll want to protect your city with Phalanx units (stronger and more advanced than Militia units), which can be done once you have discovered Bronze Working.

MOVING AHEAD: EXPLORING AND EXPANDING

Once the capital city is established and protected, it's time to start exploring and expanding. To do this, you must create additional Military units to explore and additional Settler units to found cities.

From this point on, everything you do will be done in *turns*. Each turn represents the passage of time; at the beginning of each turn, you make your decisions. Often, you'll need to accomplish multiple tasks during a single turn, which makes it vital that you understand what everything on the game screen represents. The game screens are covered in detail in the next chapter.

**UNDERSTANDING
THE GAME
SCREENS**

F I V E



No matter which version of Civilization you're playing, there are two primary game screens:

- The Main Game screen
- The City screen

The Main Game screen offers a close-up graphical overview of the terrain in the center of the screen, a series of pull-down menu options at the top of the screen, a small map of the entire (explored) world, and a data window containing vital information about each terrain square, city, and active unit.

The City screen also includes a set of pull-down menu options and graphically depicts within its windows just about everything you need to know about a specific city in your civilization: its location, population, resources, food storage, City Improvements, and more.

THE MAIN GAME SCREEN'S MENUS

At the top of the Main Game screen in DOS (Figure 5.1) there are five primary pull-down menus. They are

- The Game menu
- The Orders menu
- The Advisors menu
- The World menu
- The Civilopedia menu

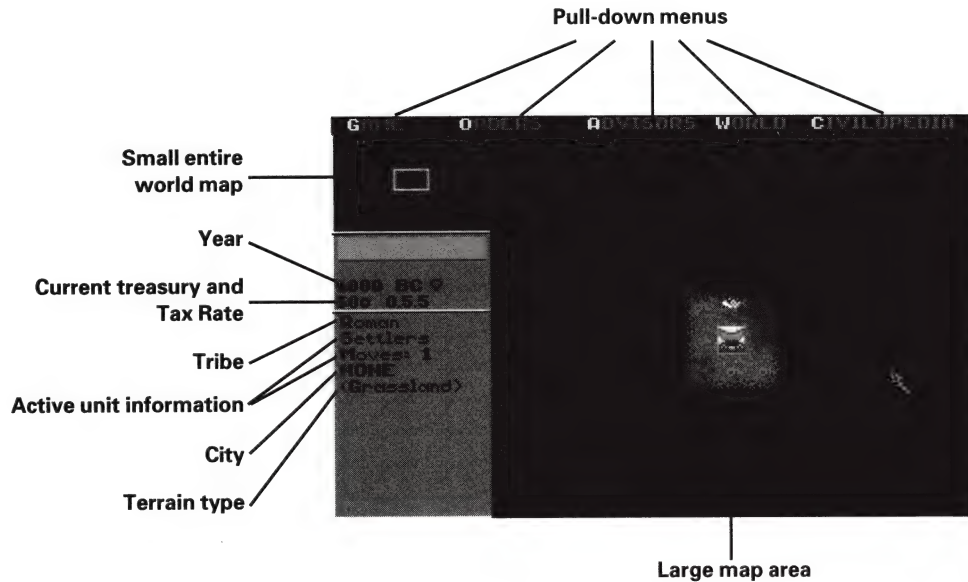


FIGURE 5.1 *The Main Game screen as it appears at the beginning of a game in DOS*

The Main Game screen in Windows (Figure 5.2) offers eight pull-down menus:

- The File menu
- The Edit menu
- The Orders menu
- The Advisors menu
- The World menu
- The Civilopedia menu
- The City menu
- The Help menu

To activate any of these pull-down menus in DOS, hold down the Alt key on the keyboard and press the first letter of the key word—Game, Orders, Advisors, World, or Civilopedia—seen on the screen (e.g., Alt+G for the Game menu, Alt+O for the Orders menu, and so on). If you're using

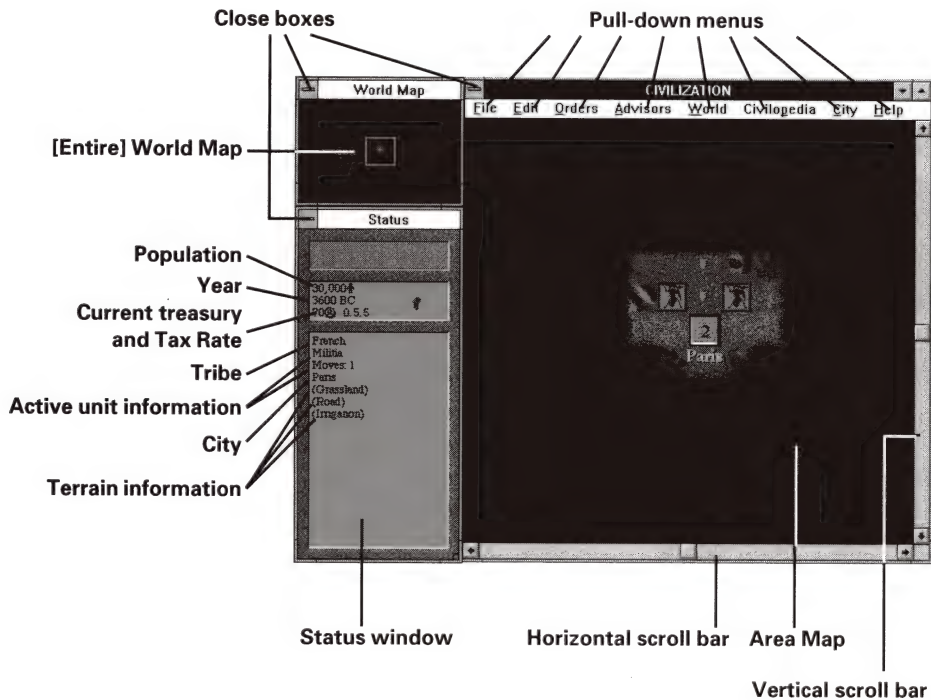


FIGURE 5.2 *The Main Game screen as it appears at the beginning of a game in Windows*

a mouse, you can point the mouse at the appropriate choice on the menu bar and click to select that choice. In Windows, simply click on the appropriate word on the menu bar or hold down the Alt key and press the hot key indicated on the menu.

Within each pull-down menu is a variety of options, some of which you will use often. Others you'll use less frequently, but when you do use them, they can be extremely helpful.

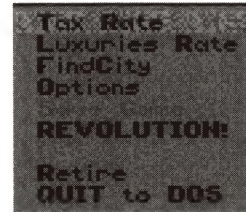


THE GAME MENU IN DOS

DOS

By pressing Alt+G or clicking the mouse on the word Game in the DOS version of Civilization, you will discover the following choices in the Game pull-down menu, which you can select by clicking with the mouse or using hot keys:

Tax Rate	T ↵
Luxuries Rate	L ↵
FindCity	F ↵
Options	O ↵
Save Game	S ↵
REVOLUTION!	R ↵
Retire	RR ↵
QUIT to DOS	Q ↵

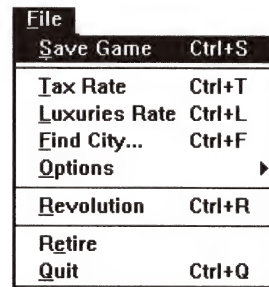


THE FILE MENU IN WINDOWS

WINDOWS

The File pull-down menu in Windows offers essentially the same options as the Game pull-down menu in DOS. Once you've accessed the File pull-down menu by pressing Alt+F or using the mouse, these options can be selected with the mouse or the corresponding keyboard commands:

Save Game	Ctrl+S
Tax Rate	Ctrl+T
Luxuries Rate	Ctrl+L
Find City...	Ctrl+F
Options	O
Revolution	Ctrl+R
Retire	E
Quit	Ctrl+Q





Tax Rates and Luxury Rates

In Civilization, the money raised by each city through taxation can be divided and spent in three possible areas:

- 1 Building, buying, and/or maintaining City Improvements
- 2 Conducting scientific research
- 3 Purchasing Luxuries

The way you can divide your civilization's income is based on how you allocate tax revenue. Use the Tax Rate and Luxuries Rate options found under the File pull-down menu to determine what percentage of tax revenue will be spent on each of the above-mentioned areas.

The Tax Rate option allows you to determine what percentage of your people's income will go toward the upkeep of the civilization. When you select this option, a submenu will appear in another window, offering you multiple tax rate options. From the start of a simulation, the default tax rate is 50% Tax (50% Science).

Select new Tax rates:		
0% Tax,	(100% Science)	
10% Tax,	(90% Science)	
20% Tax,	(80% Science)	
30% Tax,	(70% Science)	
40% Tax,	(60% Science)	
50% Tax,	(50% Science)	
60% Tax,	(40% Science)	
70% Tax,	(30% Science)	
80% Tax,	(20% Science)	
90% Tax,	(10% Science)	
100% Tax,	(0% Science)	

One of your toughest goals as you proceed in this game will be to keep your citizens happy. To do this, you'll need to allocate resources to create luxuries. One way to keep your people happy is to offer them a high Luxuries Rate, which means that a large portion of the city's tax income will be allocated to build luxury items for the population. When you select this option, a submenu will appear offering you a variety of Luxury Rate levels. The default Luxury Rate is 0% Luxuries (50% Science).

NOTE

Making the Luxury Rate higher or lower is just one way to keep your citizens happy. Other options will be explored later.

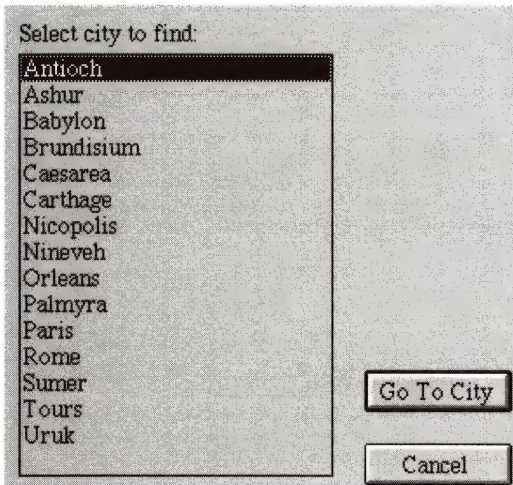


Find City

Once your civilization has begun to expand and you have built up multiple cities, you may start getting confused as to where specific cities are located on the map. The DOS Find City option allows you to type in the name of the city you wish to locate. The main map screen will then quickly move to that location.

If several cities are located close together or a city has several units placed around it, the name of the city may be concealed on the screen. Just click your mouse on the concealed city, and its City screen will be activated.

In Windows, selecting the Find City command will cause this window to appear. It allows you to click on the city name of your choice. To re-center the Area Map portion of the screen, click the mouse on the Go To City icon.



Options

The Options submenu features the following game play options:

- Instant Advice
- AutoSave
- End of Turn
- Animations
- Sound
- Enemy Moves
- Civilopedia Text
- Palace



To select an option, click the mouse on it or use the hot key(s) indicated on the Options submenu. An option that is turned on will show a check mark next to it. As a new player, you want to ensure that **Instant Advice** is activated; otherwise, you could miss out on valuable tips.

The **AutoSave** feature (an alternative to the manual Save Game option) will automatically save your game data every fifty turns.

Everything that you do once your simulation begins is done in turns. Each turn represents a shift in time—between one and twenty years—during which you implement your strategies by moving active units. If the **End of Turn** option is selected, the computer will alert you when the last of your units has moved, allowing you to examine your cities before the turn ends (you must press ↵ to go to next turn). If End of Turn is not selected, the computer goes right to the next turn. Once your civilization becomes large and consists of many cities that are spread out on multiple continents, activating this feature gives you the opportunity to plan strategies and do city maintenance in cities where nothing happened during the turn.

While this game does not offer many animated action graphics, there are a few animated sequences that take place—when you establish a new city, for example. If you wish to skip over these sequences, you can turn off **Animations**.

The **Sound** option allows you to toggle the music and sound effects on and off. If you do not activate the Sound option, you will not hear anything when playing the game. (The default is for the Sound option to be on.)

If the **Enemy Moves** option is selected, you will see the movement of units that are adjacent to your units on the currently visible areas of the map. Once you're deep into a simulation and there are many enemy units moving around the main map, you might want to turn off this feature in order to speed up the game.

NOTE

Some versions of Civilization contain a programming error. Be sure to read the section on bugs in Appendix B to discover how the Instant Advice option might be affected.



Whenever you obtain a Civilization Advance (new knowledge), information from the Civlopedia about that new knowledge will be displayed if the **Civlopedia Text** option is activated from the Options menu. (The default is for this option to be on.)

NOTE

A new knowledge in Civilization is known as an Advance or an Advancement—the terms are interchangeable.

Likewise, if the **Palace** option is selected, the animation sequences that accompany an addition to your Palace will be displayed.

Save Game

Since a typical simulation lasts many hours, you may want to complete a game over several sittings. At any point in a simulation, you can save the game data using the Save Game feature, which allows you to continue playing from the same point at a later time. When you select this feature, you will be asked on what disk drive you want to save your game data. In DOS, the program will automatically select a file name and will save the game data in one of ten predetermined locations. To change the location, use the mouse or arrow keys to move the highlighted bar. In Windows, you can save an unlimited number of games (based on available disk space), and you can name your saved game files yourself.

NOTE

Each time you save a game to a floppy disk or hard disk, approximately 50K of disk space is required.

In the DOS version, the file name and description the program generates will include your name, the name of the country you are ruling, and the year in which the simulation was saved.

Revolution

As your civilization evolves, you will have the opportunity to rule using any one of six forms of government (despotism, anarchy, monarchy, communism, republicanism, or democracy). Each form of government offers specific advantages and disadvantages that you will want to take advantage of as you play. To change your form of government, select



Revolution from the Game (DOS) or File (Windows) pull-down menu found in the Main Game screen. When choosing to change the form of government, you can expect your civilization to go through a transitional phase (a period of anarchy).

Retire

If things look grim during a simulation and you want to just quit without saving the game, select the Retire option. When you retire, your current score will be displayed, the game will end, and you will be returned to the DOS prompt or the Windows screen.

Quit

After the game data is saved using the Save Game option, the Quit to DOS feature can be used to exit the game and return you to the DOS prompt. (In Windows, select Quit from the File menu, and you will return to the Windows screen.)

THE ORDERS MENU

Press Alt+O or click on the Orders menu and you will discover a list of options that will be used frequently during the simulation. The options available to you under the Orders menu will vary, depending on what type of unit is currently active. (A unit is a graphic icon that depicts a citizen or group of citizens by type. The active unit will be the one flashing on the map portion of the Main Game screen.)

To move the active unit in DOS, use the directional arrows on your keyboard. (Please consult the “Moving Units” section in Chapter 3 for information on how to move the active unit in Windows.) Each unit can move a predetermined number of spaces in any direction. (If an enemy is located nearby, movement will be limited.) Only one unit may be dealt with at a time, but a turn may involve making decisions for multiple units.

NOTE

You can only change to a form of government for which your civilization has already acquired the necessary knowledge (unless you have discovered the Pyramids Wonder of the World). See Chapter 6, “The Elements of Civilization,” for more on the Pyramids and other Wonders of the World.

Orders

No Orders	N
Found New City	D
Build Road	R
Build Irrigation	I
Change to Forest	M
Clean Up Pollution	K
Fortify	F
Wait	W
Sentry	S
Go To	G
Pillage	P
Home City	H
Unload	U
Jump to Unit	J
Hide Units	T
Disband Unit	D



In addition to movement commands, units can be given orders when they are active. Here are a few of the options that may be available to you:

No Orders

This allows you to skip a turn and not move or convey orders to the active unit.

Fortify

Ground armies can use this feature to fortify themselves (fortifying a unit is like adding defensive armor), which makes them 50% stronger against attacks. When a military unit is fortified, it must remain stationary. Thus, it is good to fortify military units that are guarding a city's perimeter, but not those that are being sent elsewhere.

Sentry

You can take an active unit and place it on sentry duty using this command. When a unit is assigned to sentry duty, it will remain inactive and stationary until an enemy unit approaches, at which point it will automatically become active. Sentries will also automatically board any ships that leave that city.

GoTo

This command allows army units to proceed to a specific location as fast as possible. When you're under attack, this command comes in handy. Once you select a GoTo order, you must select a destination for the unit.

Pillage

If you choose to destroy any land improvements that have been made on a square of land—for example, irrigation or mines—you can command certain types of active units to pillage the square they occupy. Only do this if you want to destroy an enemy city rather than take it over.

**Home City**

If a unit has traveled from its Home City to a distant city, it is cheaper and easier to maintain that unit if you assign it a new home in the new city. To change an active unit's Home City, use this option. If the active unit is an aircraft, it will return to the nearest friendly city.

Disband Unit

A unit may become outdated or unnecessary. Instead of using your resources to maintain that unit, you can disband it.

In the Windows version of Civilization, the Orders pull-down menu also includes the Jump To Unit and Hide Unit options. The **Jump To Unit** option centers the Area Map on the current active unit. The **Hide Unit** option will make the unit(s) on a certain terrain square temporarily disappear so that you can see what's underneath. This feature is handy if you need to see the terrain under the unit(s).

NOTE

From the Orders pull-down menu, some units—such as Settlers, Diplomats, and Caravans—will be offered additional or alternate menu options (to perform additional tasks) within this submenu. We'll go into that later.

THE ADVISORS MENU

In Civilization, you are the leader. Like any smart leader, you have several top Advisors to provide you with important information as you proceed. To access your Advisors, press Alt+A or click on the Advisor menu. Each Advisor has a specialty—trade or science, for example. Select the appropriate Advisor from the Advisors pull-down menu (see Figure 5.3) by clicking with the mouse or pressing the key(s) assigned to that Advisor. In DOS, use the function keys to access your Advisors: F1 for the City Status Advisor, F2 for the Military Advisor, and so on. In Windows, use the control key in addition to the corresponding number: Ctrl+3 for the Intelligence Advisor, Ctrl+4 for the Attitude Advisor, etc.

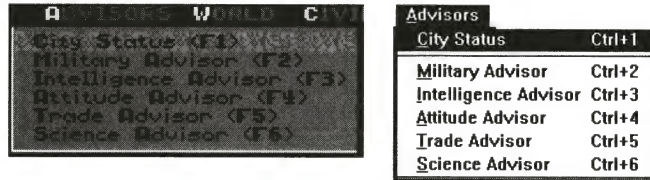


FIGURE 5.3 The Advisors pull-down menu in DOS (left) and Windows (right)

City Status Advisor

This Advisor provides a quick overview of each of your cities—describing its size; what type of unit, Wonder, or Improvement it is producing; and its available resources.

You'll want to access the City Status Advisor (shown in the Windows version here) often, especially when you have established several cities.

CITY STATUS		
Kingdom of the Jasonians		
King Jason The Great 1947 AD		
Babylon	6-17 5 7	Pyramids (1 76/300)
Paris	6-15 7 4	Courthouse (67/60)
Rome	3-6 4 3	Catapult (28/40)
Stuner	8-21 10 9	Great Library (1 8/600)
Orleans	5-11 5 5	Library (22/60)
Caesarea	6-13 3 3	Granary (1 5/60)
Uruk	7-21 4 8	Great Library (1 2/300)
Carthage	8-17 3 9	Courthouse (0/60)
Nicopolis	3-6 4 2	Sail (39/40)
Tours	6-13 9 5	Pyramids (1 89/300)
Brundisium	3-7 1 5	Sail (7/40)
Nineveh	5-12 7 3	Colossus (21 8/200)
Antioch	4-12 2 3	Colosseum (72/1 00)
Palmyna	3-8 3 5	Great Library (1 59/300)

Military Advisor

Use this Advisor to track the military forces at your disposal (see Figure 5.4). The Military Advisor menu selection results in an information window that tells the number and type of military units available and/or

currently in production. A second window shows a record of your military losses. This option also offers you information—such as how quickly new military units can be put into action—that can be very helpful when you're in a combat situation. To switch between the Military Advisor screens, click the mouse anywhere in the information window.



FIGURE 5.4 The Military Advisor's report parts 1 and 2: Military Status and Military Losses (Windows version shown)

Intelligence Advisor

In order to obtain Intelligence, you must first establish Diplomats and then, embassies. Once you've built embassies in foreign lands, you can use the Intelligence Advisor's report to learn about your enemies and allies. For example, you will be able to determine a rival city's military strength and resources.

Attitude Advisor

The Attitude Advisor option allows you to keep tabs on your civilization's internal maintenance—whether your people are happy, contented, or annoyed. If you really manage to piss off your citizens—by starving them or providing inadequate resources, for example—they won't wait for you to check your Attitude Advisor's report; they will be sure to inform you directly, through message windows that appear on the game screen.

Trade Advisor

Your Trade Advisor will keep you up-to-date on how well each of your cities is doing financially. This report (shown here in the Windows version)

TRADE REPORT
Kingdom of the Jasonians
King Jason The Great 1947 AD

City Trade	Maintenance Costs
Babylon	3 Granary, 3@
Paris	1 MarketPlace, 1@
Rome	1 Library, 1@
Sumer	1 Courthouse, 1@
Orleans	7 City Walls, 14@
Caesarea	3 Aqueduct, 6@
Uruk	Total Cost 26@
Carthage	
Nicopolis	
Tours	
Brundisium	
Nineveh	
Antioch	
Palmyra	

Total Income: 100
Total Cost: 26

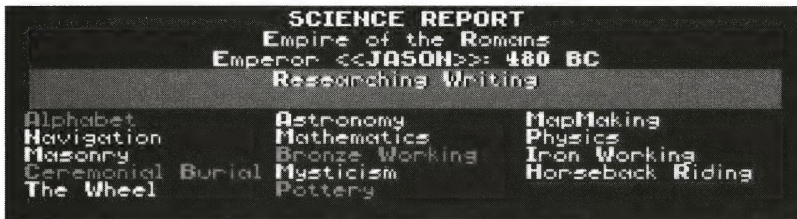


tells you how tax dollars are being allocated, what scientific research is being conducted, and what luxuries you've made available to your citizens.

This report also tells you what percentage of your financial resources is going to maintain City Improvements and how many turns it takes at the current tax rate to reach the discovery of the next Advancement your scientists are pursuing. (To find out how close your scientists are to reaching that Advancement, consult your Science Advisor.) Based on the information provided by your Trade Advisor, you can determine the productivity of each of your cities.

Science Advisor

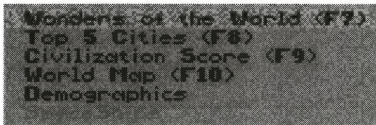
Use your Science Advisor (shown here in the DOS version) to track your past scientific achievements as well as the Advances your scientists



are currently developing. The lightbulb icons in this report indicate the amount of research that has been completed for the current Advance. When the lightbulbs fill the bar from left to right, the Advance is learned.

THE WORLD MENU

By pressing Alt+W or by clicking the mouse on the word World (located at the top of the Main Game screen), you can gain access to the



World menu. This menu (shown here in DOS) provides information—about the entire world, not just your own civilization—on such topics as Wonders of the World, the top five cities in the world, Civilization score, world geography, world demographics, and progress toward building spaceships.

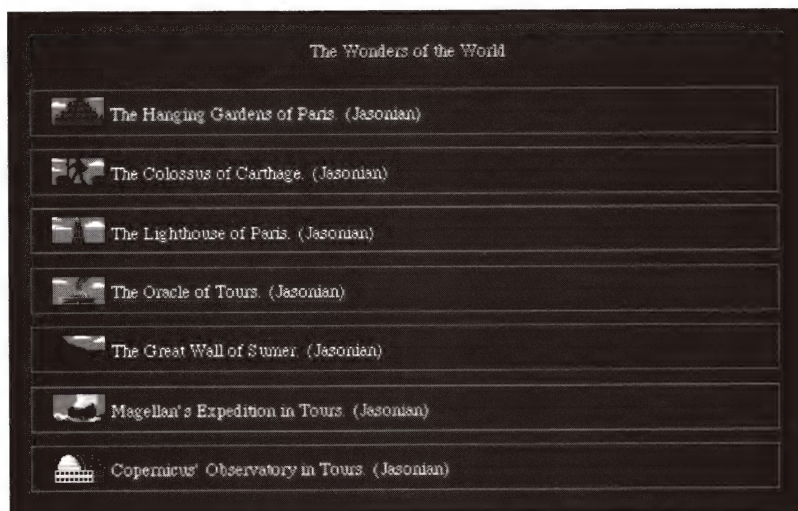


To access the various options in the World pull-down menu, click on them with the mouse or press the appropriate function keys (in DOS) or key combinations (in Windows), as follows:

Option	DOS key	Windows keys
Wonders of the World	F7	Ctrl+7
Top Five Cities	F8	Ctrl+8
Civilization Score	F9	Ctrl+9
World Map	F10	Ctrl+0
Demographics	D	Ctrl+D
Spaceships	S	Ctrl+P

Wonders of the World

You can use your civilization's resources to build any or all of the twenty-one Wonders of the World. Each Wonder will offer your empire a specific benefit (we'll cover this in Chapter 6, "The Elements of Civilization"). Just as your civilization will try to build these Wonders, so will the other civilizations on your planet. The Wonders of the World menu option (shown here in Windows) will tell you where all of the existing Wonders are located. (And, yes—they can be captured!)





Top Five Cities

For a quick look at the most productive and successful cities in your world, check out the Top Five Cities menu option (shown here in Win-

dows); it will provide you with a basis for comparing your civilization's progress to that of the other civilizations evolving on your planet. The top five cities are determined based on score. (See Chapter 12, "High Scorin' Civilization Fun," for details on scoring.)



Civilization Score

The ultimate goal of the game is to score over 1,000 points, which will occur around the same time you explore and colonize space. The

Civilization Score menu option gives you a quick peek at your score's progress thus far in the game.

World Map

When you choose this menu option, the Main Game screen is replaced by a map of the entire known (explored) world, centered around your capital city.

Demographics

This detailed report, comparing your people to others, includes the population, your approval rating, and numbers indicating the GNP and rates for manufactured goods, land area, literacy, disease, pollution, life expectancy, family size, military service, annual income, and productivity.



Spaceships

Space, “the final frontier,” isn’t available until the later portions of the game—your quest toward space kicks off once you have obtained the Apollo Program Wonder of the World. When you start building spaceships, chances are that other civilizations will also have this technology, so you’re going to have to win the race into space. You can use this menu option to track the status of the spaceship you have under development.

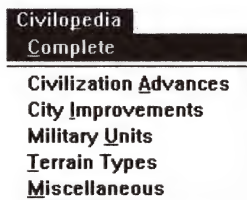
THE CIVILOPEDIA

Think of Civilization’s Civlopedia as your electronic user’s guide to being a supreme leader. This fact-filled reference contains upward of 150 tidbits pertaining to various aspects of the game. To make research fast and easy, the Civlopedia has been divided into six primary categories:

- Complete
- Civilization Advances
- City Improvements
- Military Units
- Terrain Types
- Miscellaneous

Many topics listed in the Civlopedia span both a general information screen describing the topic and its relation to real-life history and a second screen describing how the general information might be pertinent to a particular simulation.

When you press Alt+C (DOS) or Alt+P (Windows) on the keyboard or click the mouse on the word Civlopedia, a submenu will appear (shown here in Windows). To narrow your search, select one of the general categories, such as City Improvements, and then look up specific Improvements such as Banks or Hydro Plants.



If you select the Complete menu option, you will see a comprehensive alphabetical listing of all the entries within the Civlopedia (as shown in Figure 5.5). To move around within the listing,



use the mouse or keyboard arrows to highlight the various topics. (Windows offers another option: using the mouse to control the scroll bar at the bottom of the window; this allows you to quickly scroll forward and backward through the list.) When the topic you're interested in is highlighted, click the mouse on the OK icon.

MORE	ENCYCLOPEDIA of CIVILIZATION	EXIT
Advanced Flight	Chemistry	Factory
Alphabet	Chivalry	Feudalism
Anarchy	City Walls	Fighter
Apollo Program	Code of Laws	Flight
Aqueduct	Colosseum	Forest
Arctic	Colossus	Fortify
Armor	Combustion	Fortress
Artillery	Communism	Frigate
Astronomy	Computers	Fusion Power
Atomic Theory	Conscription	Genetic Engineeri.
Automobile	Construction	Granary
Bank	Copernicus' Obser.	Grassland
Banking	Courthouse	Great Library
Barracks	Cruiser	Great Wall
Battleship	Cure for Cancer	Gunpowder
Bomber	Currency	Hanging Gardens
Bridge Building	Darwin's Voyage	Hills
Bronze Working	Democracy	Hoover Dam
Cannon	Desert	Horseback Riding
Caravan	Despotism	Hydro Plant
Carrier	Diplomat	Industrialization
Catapult	Disband	Invention
Cathedral	Electricity	Iron Working
Cavalry	Electronics	Ironclad
Ceremonial Burial	Engineering	Irrigation
Chariot	Explosives	Isaac Newton's Co.

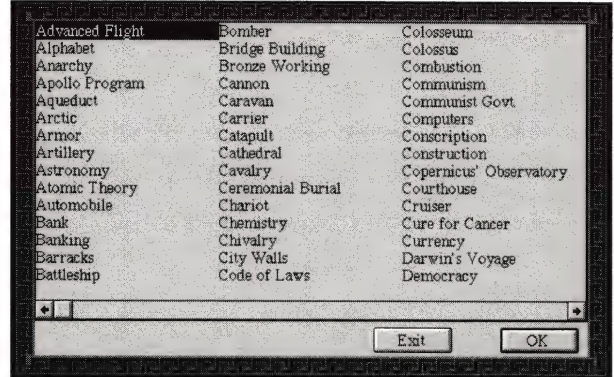


FIGURE 5.5 The complete Civopedia menu in DOS (left) and Windows (right)

Civilization Advances

This portion of the Civopedia describes each of the technological Advances available in the simulation (there are more than seventy), and describes how each Advance fits into the scheme of the rest of the game.

NOTE

To help you understand how Advancements are related to each other and to the evolution and expansion of your civilization, they are described in detail and illustrated in charts in Chapter 9 of this book.

City Improvements

Here you can gain access to information on the various City Improvements available to you, including the Wonders of the World and their advantages to your civilization. Before some City Improvements can be achieved, they require specific technological Advancements—for example, a Bank can't be built before you have invented Currency.



Military Units

This area of the Civlopedia will help you better understand the power and capabilities of each type of military unit. It also covers information on Diplomats and Caravans.

NOTE

See the section entitled “Your Civilization Is Comprised of Units” in Chapter 6 for more information on military units.

Terrain Types

Many types of terrain are available to build your civilization and its cities upon. Each type of terrain offers advantages and drawbacks, which the Terrain Types portion of the Civlopedia can help you understand.

NOTE

Turn to the “Understanding the Lay of the Land” section in Chapter 6 for more information about terrain types.

Miscellaneous

The Miscellaneous subsection of the Civlopedia (see Figure 5.6) contains information that just don’t fit under the other categories—for example, the types of government available in the game.

ENCYCLOPAEDIA OF CIVILIZATION

EXIT

Anarchy
Communism
Democracy
Despotism
Disband
Fortify
Fortress
Irrigation
Luxuries
Mining
Monarchy
Pillage
Pollution
RailRoads
Republic
Roads
Science
Sentry
Taxes
Trade Routes
Veteran Units

FIGURE 5.6 The Civlopedia Miscellaneous menu contains topics that don’t seem to fit in the other menus (shown in DOS).



OTHER MENUS (WINDOWS ONLY)

WINDOWS

Three pull-down menus which are only available in the Windows - edition of the game are Edit, City, and Help. The **Edit** menu offers commands which help you manipulate the windows on the game screen. The **City** menu offers additional options which are only available when the City screen is displayed. (See the last section of this chapter, "Using the City Menu with the City Screen," for more details.) The **Help** menu offers on-screen help plus an About feature that displays the names of the people involved in the development of this game.

THE MAIN GAME SCREEN'S WINDOWS AND MAPS

A vast amount of information can be learned from the options found under the various pull-down menus; however, there is also a substantial amount of information constantly available to you on the game screens in the form of maps and windows (see Figure 5.7).

THE UNIT INFORMATION WINDOW

Along with the large map and the pull-down menus on the Main Game screen, you'll see the Unit Information window (part of the Status window in the Windows version of Civilization) located in the middle-left portion of the screen. This window will keep you informed about the population of your civilization, the current year, and the funds available to you, as well as the Tax, Luxury, and Scientific Rates you have selected. Also featured in this area is an environmental indicator, which will be handy for helping you control pollution when that becomes an issue.

30,000↑
3600 BC
700 0.5.5

Much of the information within this window can and will change constantly as each turn takes place. Use this window to track how quickly your population and finances are growing or shrinking and at what intervals time is passing.

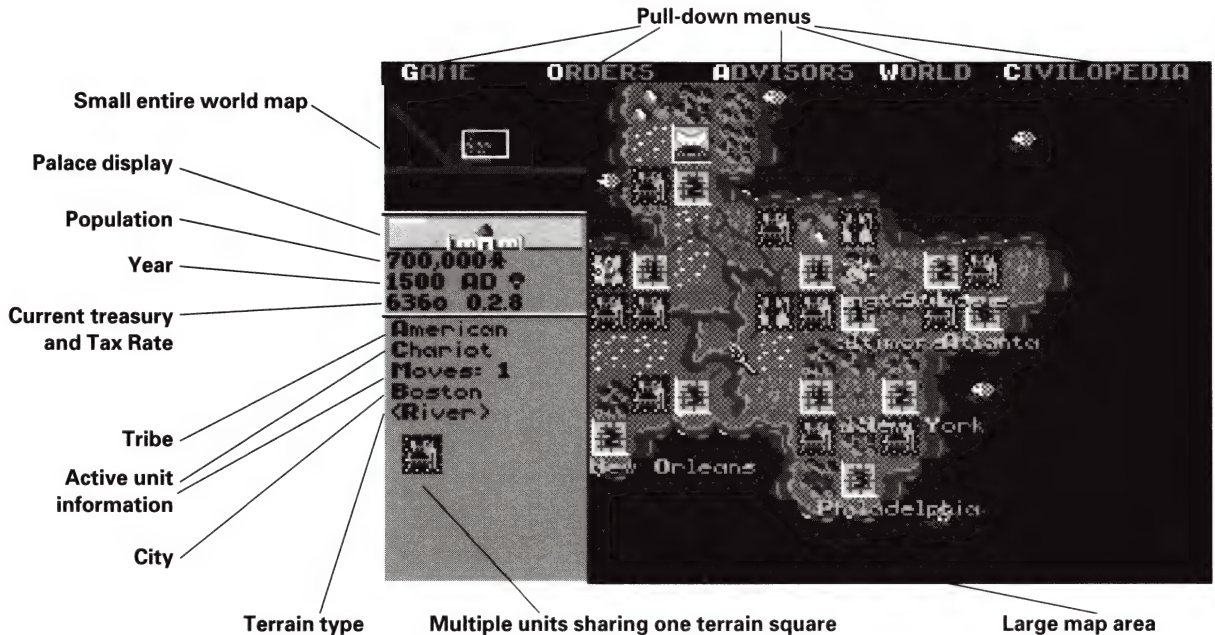
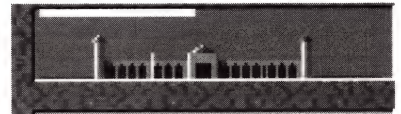


FIGURE 5.7 The Main Game screen at an advanced point in the game (DOS version)

YOUR PALACE

Above the Unit Information window is a small graphic model of the outside of your Palace, which depicts the additions that have occurred since the start of the game.



THE WORLD MAP

In the upper-left portion of the Main Game screen, just above the picture of the Palace, is a tiny map of the entire explored world. You can click your mouse on any portion of this small map to quickly scroll around the larger map in the center of the Main Game screen; this gives you an instant overview of known cities, oceans, and land masses, as well as the unexplored (blank) areas.



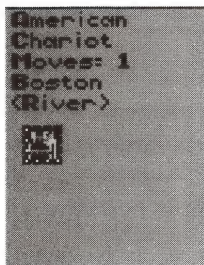
You can see an extra-large version of the World Map (see Figure 5.8) by selecting the World Map option from the World pull-down menu. The black areas you see on the map are unexplored, while the colored dots correspond to cities occupied by the various civilizations in the simulation.



FIGURE 5.8 To see the whole world in a large window, select the World Map option from the World pull-down menu (Windows version shown).

Active Unit Information

The bottom-left portion of the Main Game screen displays information about the active unit. From this data, you can easily determine from what city the active unit came, what type of unit it is, how many squares in any direction it can move during a turn, what type of terrain lies beneath it, and what other units may be under the active unit (it is possible for units to pile up on one square of land).



If multiple units are on one terrain square, the active unit will flash, and icons representing the other units on the



square will be displayed at the bottom of the Unit Information window in the lower-left corner of the Main Game screen.

UNDERSTANDING THE CITY SCREEN

The second primary game screen used within Civilization is the City screen, which graphically depicts just about everything you need to know about a specific city within your civilization. Each city you found will have its own City screen. This screen is divided into multiple windows, as shown in Figures 5.9 and 5.10. You'll have to become acquainted with the meaning of each graphic icon to fully understand what's happening within the city.

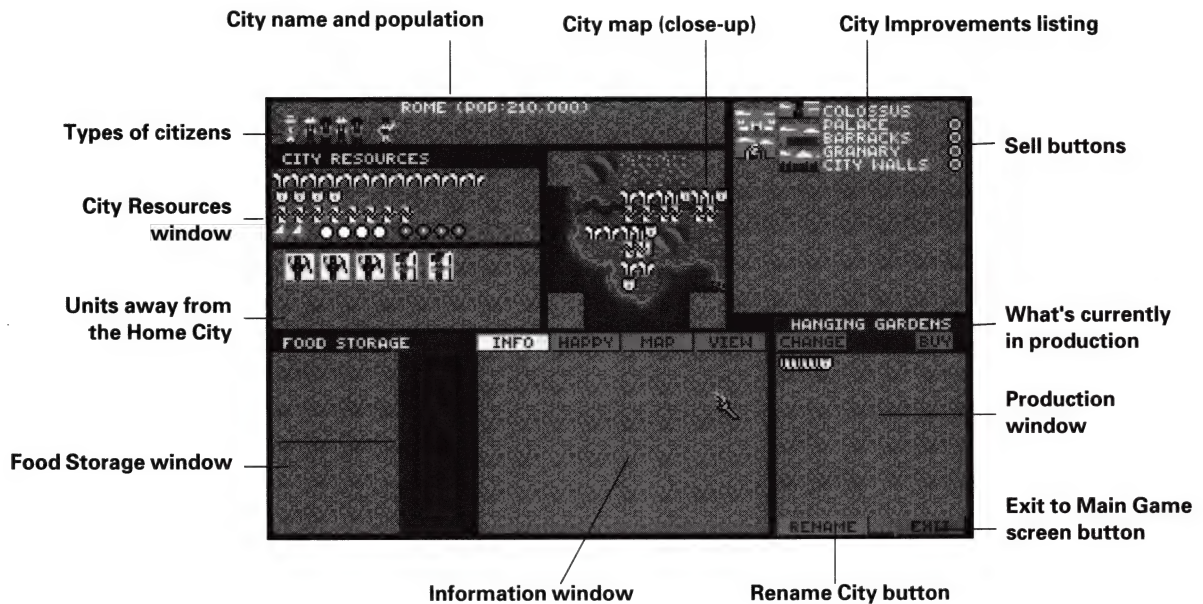


FIGURE 5.9 What's what on the DOS City screen

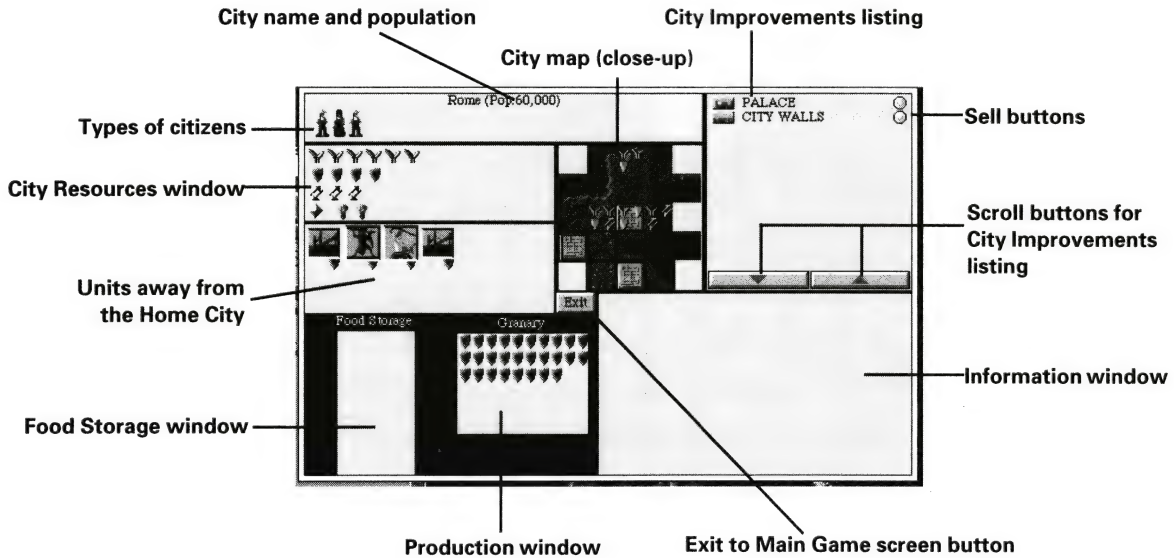


FIGURE 5.10 *What's what on the Windows City screen*

The City screen will automatically appear when a city is initially founded, and then again when the city has completed the production of a unit, City Improvement, or Wonder of the World. You can also gain access to this screen at any time by clicking your mouse on the City icon that is located on the large map area. A City icon is a square with a number in the center of it (shown here), representing the overall strength of that city. Unless it is covered, the name of the city will appear near the square on the Main Game screen.



From the City screen, you can expect to obtain information about the city's location, population, resources, food storage, current production, and obtained Improvements. You'll notice that each of these windows contains special graphic icons—for example, in the population roster in



the upper-left portion of the City screen, several different types of people are depicted.

CREATING CITIZENS AND ASSIGNING THEIR ROLES

It is from the City screen that you order your citizens to produce (or purchase) City Improvements. The City screen also gives you the ability to create Taxmen, Scientists, and Entertainers (elite citizens who serve specific purposes in the game) from existing citizens.

Located near the center of the City screen is another map of the city and its immediate surroundings. From this close-up City Map you can re-assign the jobs of farmers by taking them out of the fields and transforming them into Taxmen, Scientists, or Entertainers. You can also see the size of your population, represented both graphically and numerically, by checking the upper-left corner of the City screen.

Workers and Elites

As you can see from the graphic depiction of your citizens in the upper-left portion of the City screen, there are two primary types of people in your population—workers and elites. The workers in your population can be happy, content, or unhappy with your leadership abilities.

Elite citizens (those who have been made into Taxmen, Scientists, and Entertainers) have much more power in the city, in that they help to build units, Improvements, and Wonders. Creating elites results in decreased food production for the city, because a farmer has to be taken out of the work force in order to be converted into the elite position. With fewer farmers, less food is created by the city.

Entertainers are meant to keep the population happy (or at least content). As your city grows and becomes productive, you'll want **Taxmen** to boost the city's efficiency and to generate better tax

TIP

In Civilization, you get more points if your population is a happy one. Your population can also be merely content, which isn't worth as many points but is much better than an unhappy population. To keep a city from entering a state of civil disorder, you'll want to ensure that it maintains more happy people than unhappy people.

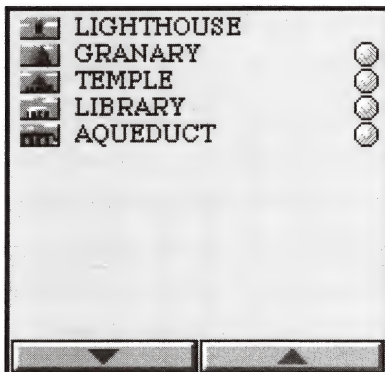
**TIP**

Don't create elite citizens until the city becomes productive and can maintain an adequate storage of food. Also, keep in mind that the use of Entertainers is only a quick and temporary fix for changing the attitude of the city's population.

revenues. Taxmen allow each city to better manage finances and tax collection. With Taxmen, tax dollars can be stretched, so you can keep the Tax Rates lower, which will keep your population happier in the long run. **Scientists** boost the creation/discovery of technological Advancements.

TRACKING CITY IMPROVEMENTS: THE CITY IMPROVEMENTS LIST

Located in the upper-right portion of the City screen is the City Improvements list. As each city purchases or produces a City Improvement, the icon representing the Improvement will be displayed within the City Improvements list. At the start of the game, the only item listed within the City Improvements list will be the Palace (automatically built within your capital city when it was founded). You can use this window to quickly determine whether the overall needs of the city are being met.



Some Improvements, such as Granaries, are necessary to maintain the city's growth and population, while other Improvements, such as the Apollo Program Wonder of the World, are necessary to progress in the game. Maintaining a good balance among these Improvements will be productive

in the long run.

City Improvement Maintenance

The Improvements made to each city are worth money. If you find your finances becoming seriously low, it is possible to sell a City Improvement; however, you won't want to sell something the city requires to maintain its population. For example, a Granary is important for storing surplus food to feed a growing population. If you decide to sell the city's Granary, the city could experience a famine shortly thereafter.



DEVELOPING AND PURCHASING IMPROVEMENTS: THE PRODUCTION WINDOW

One of the most important windows within the City screen is the Production window, from which you determine which City Improvement you wish to develop or purchase. The Production window in the DOS version can be found on the right side of the City screen, below the City Improvements list. In the Windows version, the Production window is in the lower-center portion of the City screen. To select or change the City Improvement you wish to develop or purchase in DOS, click your mouse on the Change button in the Production window; in Windows, click on the unit icon that is displayed in this window. Instead of waiting until you have enough resources to construct a City Improvement or unit from scratch, you can immediately purchase it for the listed price if you have enough resources in your treasury.

As your civilization becomes more technologically advanced, the number of different types of units and City Improvements available to you will grow. (See the reference charts in Chapter 9 to determine the best path to take in order to achieve specific Advances.) At any time during the production of a unit or City Improvement (some will develop only after many turns) you can change your mind and reallocate your resources to produce a different unit or City Improvement instead. For example, if you receive a surprise attack from an enemy, you may want extra military units at your disposal.

NOTE

To find out the cost of a unit, Improvement, or Wonder, first select the item using the Change icon, then click on the Buy icon (next to the Change icon) to see the item's price.

TIP

There is only one of each Wonder of the World. If you have assigned one of your cities to develop a Wonder of the World but find that another civilization has discovered that Wonder first, you should reallocate your resources to pursue something else. Later, when you learn where that Wonder is located, you can launch an attack and try to capture it.



Once a City Improvement is built or achieved, reallocate your city's resources toward working on a different Improvement or Wonder of the World. Each city can build one of each City Improvement and an unlimited number of each type of unit. Since there is only one of each Wonder available to be built, no two cities can have the same Wonder.

UNDERSTANDING TRADE ROUTES AND POLLUTION: THE INFORMATION WINDOW

Near the center of the City screen is the Information window. Once the city develops trade routes with other cities, that fact will be displayed within this area, along with information about the revenue generated from the trade route.

Later in the game, when your city has the capability to create pollution and other environmental hazards, this fact will be displayed within the Information window. This window also shows which units are in a city, which city owns each unit, and each of the units' status (e.g., sentried or fortified).

TIP

An excellent strategy is to ensure that each city is producing (and storing) a surplus of food—because as your population grows, you're going to need more food.

PRODUCING AND MAINTAINING A SURPLUS: THE FOOD STORAGE WINDOW

The window marked Food Storage (also on the City screen) will contain information that tells you whether the city's production capabilities can adequately feed the population.



TRACKING REMOTE UNITS: THE HOME CITY SCREEN

Just above the Food Storage window is the Home City screen. Here you can instantly see the various units from the city that are currently outside of the city. For example, you will see graphic icons representing the various military units protecting the city or exploring.

TIP

Remote (exploring) units are no longer inside the Home City, but the city is still supporting them. Their maintenance uses city resources, especially if the units are far from their Home City. Under the Orders pull-down menu, it is possible to reassign a unit to a new Home City so that you can reduce the cost of maintaining that unit.

KNOWING WHAT'S AVAILABLE: THE CITY RESOURCES WINDOW

The final window on the City screen is the City Resources window. Within this window are several different graphic icons—representing food, resources, trade, luxuries, corruption, tax revenue, scientific research, surplus food, and surplus resources, and indicating how much of each of these the city is generating.

Exactly what appears within the City Resources window will depend upon what you have assigned the population to accomplish. For example, wheat symbols represent farming and food production. Shields mean your city is geared for industrial production (manufacturing). If many lightbulbs appear in the City Resources window, it means you have created a lot of Scientists.

Some City Improvements, such as Factories, have a direct impact on production. How each element within the Resources window works within the simulation will be discussed in Chapter 8, “Civilization Strategies and Quick Tips.”



USING THE CITY MENU WITH THE CITY SCREEN (WINDOWS ONLY)

WINDOWS

The Windows edition of Civilization offers the City pull-down menu. The options listed in this menu only become active when the City screen is displayed (see Figure 5.11). From this menu, you can choose from the following:

- Auto Production (lets the computer decide what to produce)
- Change Production
- Buy Unit
- Aerial View of City (see Figure 5.12)
- Rename City
- General Information
- Happiness Chart
- Happiness Chart

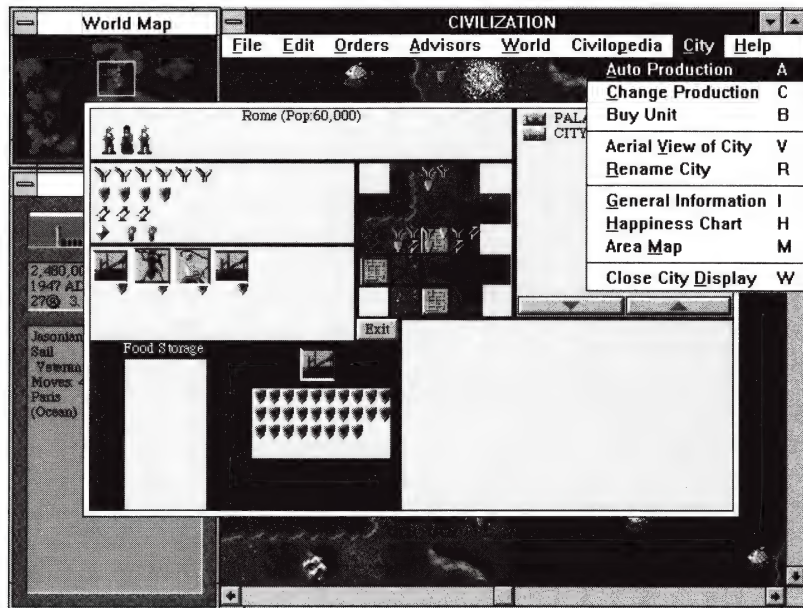


FIGURE 5.11 The City Screen with the City pull-down menu activated

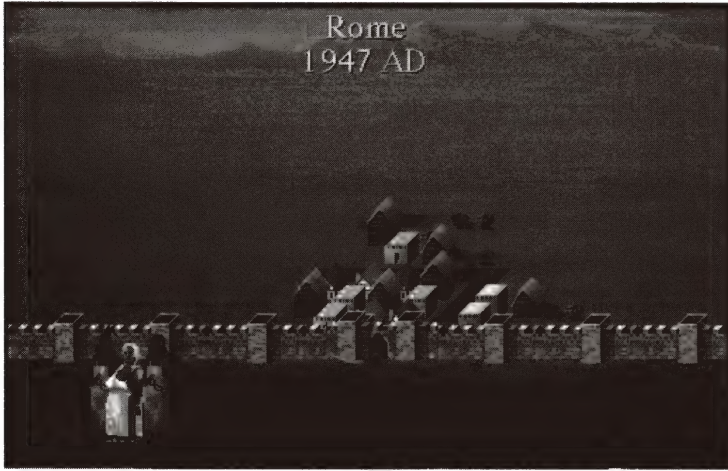


FIGURE 5.12 *Aerial View shows what Improvements and/or Wonders the city has built (Windows version shown).*

- Area Map
- Close City Display

Each of these options can be activated by clicking the mouse on the menu option or by using the single-letter keyboard command which corresponds to the menu option. For example, when this menu is visible, you can just type **A** to activate the Auto Production option.

**THE ELEMENTS
OF CIVILIZATION**

S I X



S I X

This chapter continues a detailed overview of Civilization's basic elements, in particular the government types, terrain squares, military and nonmilitary units, City Improvements, and Wonders of the World.

IN THE GOVERNMENT YOUR PEOPLE TRUST

The people of your civilization rely on their government for everything. As the leader of the government, you're in the hot seat. Within Civilization there are six types of government; however, several of them are available only after you have obtained certain Civilization Advances (knowledges). For example, *democracy* only becomes available in later parts of a simulation, after you have acquired basic knowledges, such as Writing, Code of Laws, Literacy, Mysticism, and Philosophy. The best time to switch to democracy is when most of the rival empires have been defeated and you are living in peaceful, stable times.

Other forms of government are available only under certain circumstances—for example, *anarchy* appears in a time of civil disorder after an invasion.

CHANGING GOVERNMENTS

Each form of government offers its own advantages and disadvantages in terms of your civilization's growth and well-being.

At the start of the simulation, *despotism* (defined in the next section of this chapter) is in place. By ordering a *Revolution* (found under the Game pull-down menu in DOS or the File pull-down menu in Windows)

NOTE

As you progress in a simulation, you will find that more advanced forms of government allow your population to greatly increase production and better manage its finances. No matter what type of government exists, you're still in charge.



you have the ability to change the existing form of government.

Types of Government

The six forms of government that are or will be available within the simulation are

- Despotism
- Anarchy
- Monarchy
- Communism
- Republicanism
- Democracy

Now, in case you were asleep in class when they taught about forms of government, here are brief descriptions that should prove helpful:

Despotism is a government in which the people are controlled by an absolute ruler—either a benevolent despot or a tyrant. (That’s you, when you’re playing Civilization.)

NOTE

When the time comes to change government types (in order to improve overall production and growth and to slow down corruption) you may have to go through a period of anarchy.

Anarchy is an absence of government. In Civilization, anarchy occurs when civil disorder erupts. While no central government is in existence, no taxes are collected, no scientific research is conducted and no progress is made on City Improvements.

TIP

In Civilization, the happier your people are, the harder they will work, the faster they will reproduce, and the less you will have to do to keep them happy.

Monarchy is a government led by a monarch (a person who reigns by “divine right” over a kingdom or an empire). This form of government gives less control to the ruler than does despotism but makes the population happier and more productive. In Civilization, when it comes to production,



there are definite advantages to ruling your civilization as a monarch rather than as a despot. For example, under a monarchy, the population has the ability to produce greater amounts of food and resources. If a terrain square (especially a Grassland square) has been irrigated, production will increase further under this type of rulership.

Communism is a system of government in which goods and production are commonly owned, although a government and its leader—you—still retain decision making powers. Under Civilization's communism, there is less corruption than with other forms of government.

TIP

Building Courthouses also helps to control corruption.

Republicanism is a political system where elected representatives exercise power over the people. When your civilization opens trade routes with other countries, you'll want to rule under republicanism, which gives the population some additional freedom. As a ruler of a republic, however, you'll find that the senate can override your decisions to break a treaty or invade a foreign country. And when a foreign country approaches you to make peace, the senate will automatically accept. Under less advanced forms of government—despotism, monarchy, and communism—you, as the ruler, have the option of rejecting a peace offering and declaring war.

Democracy is a government in which the people rule by majority vote (directly through their own votes and/or indirectly through the votes of their elected representatives). Democracy—the most advanced form of government in the game—makes the population happiest and gives you the best opportunity to expand production and trade. As is true with a republic, some of your decisions in a democracy (e.g., whether to attack or sign a peace treaty) must be approved by the senate.



UNDERSTANDING THE LAY OF THE LAND

One key to succeeding in Civilization is understanding the terrain and taking full advantage of it. Just as is true on Earth, the planet you inhabit while playing this simulation contains many types of land (continents and islands with different terrains) and water (rivers, lakes, and oceans). At the start of a game, your knowledge of the terrain is extremely limited, which is why you must explore.

EXPLORING AND EXPLOITING TERRAIN SQUARES

In Civilization, the entire planet is broken up into squares (or units on a grid). Each square represents an area of land that contains a specific type of terrain—such as Grasslands, Plains, or Swamps—that you may take advantage of as you establish your cities and expand your civilization. Land can be used to provide natural resources, such as food or additional wealth in the form of gems or minerals, or it can be used to defend your cities from enemies (their militaries can't cross water without boats, for example). As you will soon discover, some terrain is more useful and valuable for your purposes than other terrain.

Types of Terrain

The types of terrain found within your simulated planet include the following:

- Arctic Areas
- Deserts
- Forests
- Grasslands
- Hills
- Jungles
- Mountains

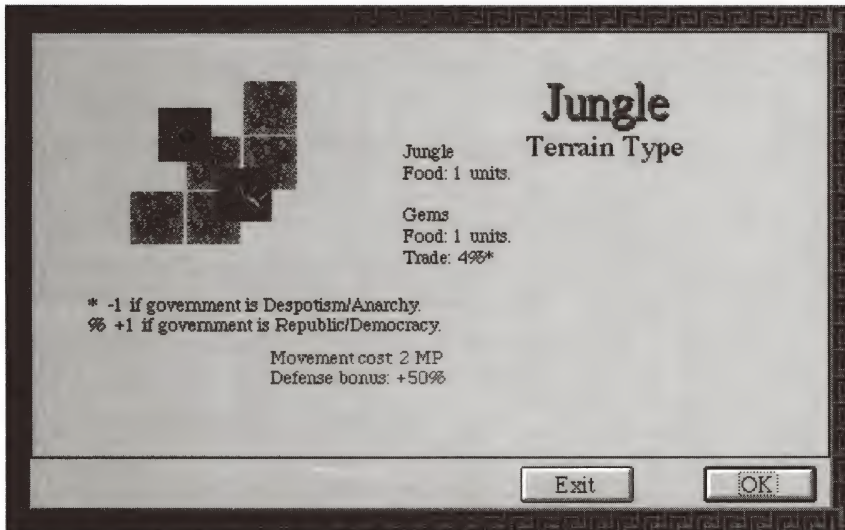


- Oceans
- Plains
- Rivers
- Swamps
- Tundras

WINDOWS

USING TERRAIN INFORMATION WINDOWS (WINDOWS VERSION ONLY)

Use the mouse to point to a specific area of terrain on the Area Map. Next, click the right mouse button; an information window will appear showing detailed information about that type of terrain.





Terrain makes a big difference in how your civilization begins, grows, and develops. Following are descriptions of the different terrain types found in Civilization:

Arctic Areas These squares of frigid terrain cannot produce food or encourage trade; thus, this type of area is far from ideal for settling your civilization.

Deserts These hot, dry areas can be irrigated and become productive, but in Civilization it is generally better to build roads through desert areas and use them as trade routes rather than settle in them.

Forests Forest areas in Civilization are adequate but not ideal for supporting cities. If you must found a city in a Forest, you may wish to first convert the land to Plains or Grasslands.

NOTE

To convert from one type of terrain to another, select the Change to [Terrain Type] option on the Orders pull-down menu. Only a Settlers unit can convert terrain squares. This must be done before a city is founded on the square.

Grasslands As you initially expand, Grasslands are good locations for building cities because you can easily grow food nearby. To create an ideal situation, irrigate Grasslands—the city you’ve founded nearby will be all set in terms of

food production.

Hills When you find Hills, start building mines in them right away so that you can take full advantage of the natural resources available. Mining for minerals, oil, or gems is an excellent way to increase your civilization’s finances. Alternatively, Hills can be irrigated, which will make them suitable for habitation. Over a series of several turns, you can build mines and irrigation on a single Hill square.

Jungles Living in the Jungle does not give you access to any great natural resources, and food and resource production will be poor. However, you can expand into Jungle areas, then convert them into Grasslands or Forests, which are far more suitable for cities.



Mountains Strategically placing cities *near* Mountains can give you a bit of added protection from enemies. However, building your city *on* a Mountain is not great—most Mountains have a minimal water supply, which makes feeding people difficult. Mountains are good for mining but useless for agriculture.

Oceans To establish trade routes with other civilizations, you will probably travel across Oceans. This can only be done by building boats and, later, aircraft. Cities assigned to producing boats must be adjacent to a water square. (Actually, you can build boats in a city on any type of terrain, but the boat can't go anywhere unless it's near water. If the city producing boats is on a River square that connects to the Ocean, you're fine. If not, the boat will get stuck and be useless.)

Plains This type of terrain—open and flat, allowing for agriculture—is rich in resources but should be irrigated to maximize your internal growth and production potential.

Rivers Building cities near Rivers is an excellent strategy—growing food near a River is easy, and Rivers provide a pathway for trade routes. Like Grasslands, River areas are ideal locations for founding your capital city and other early cities.

Swamps Swampland is obviously not the place to found your capital city, but as you expand, it can be converted into Grasslands or Forest areas.

Tundras Little can be done with these treeless and somewhat arctic terrains, so avoid settling down in these areas.

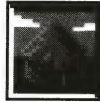
TIP

Cities near Rivers must be protected, because as progress occurs, an enemy ship could sail up the river and launch an attack.



Special Random Terrain Squares

As you explore various types of terrain, you'll probably encounter special Random Terrain squares marked by a graphic icon that looks like



a tiny hut (shown here in the Windows version). These squares can contain hidden resources, extra funds, hidden knowledge or Advances (in the form of ancient scrolls), or perhaps another tribe (sometimes friendly, sometimes not).

Only by entering these squares can you see what they offer (see Figure 6.1).

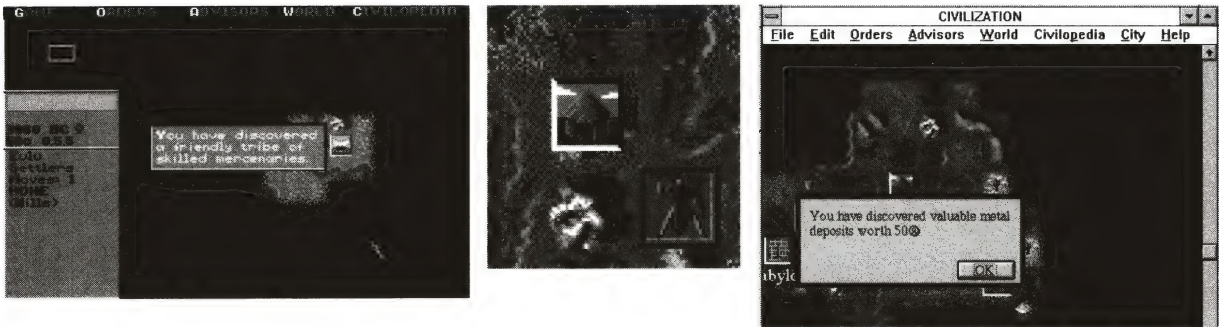


FIGURE 6.1 The screen on the left shows a Random Terrain square discovery in DOS, the middle screen shows a Militia unit about to explore a Random Terrain square in Windows, and the screen on the right shows the result of the Militia unit's exploration.

If, in a special square, you discover a minor tribe that is friendly, its population may join your civilization or give you certain benefits or

TIP

When you discover a Random Terrain square, it is wise to explore it with a military unit, just in case barbarians are hidden there and you are forced to fight. (You can explore with Settlers or Diplomat units, but they could be killed instantly if the square contains barbarians.)

bonus items. For example, if the friendly tribe has an Advance (such as Horseback Riding) that your civilization has not yet acquired, that Advance may become yours. Alternatively, you might acquire an additional city, but no new knowledge...you never can tell what will happen.

If, on the other hand, you discover a barbarian tribe, it will attack you. If you manage to capture a barbarian leader (who may or may not appear), you will be financially



rewarded, but to capture him, you must have the right military forces at your disposal. You must also capture the leader alone (without defeating another barbarian unit).

Other Resources Associated with Terrain Types

In addition to offering specific advantages, certain types of terrain may also contain special resources:

Resource	Location
Fish	Oceans
Coal	Hills
Game	Forests and Tundras
Gems	Jungles
Horses	Plains
Gold	Mountains
Oil	Swamps
Oases	Deserts

Often, you can take advantage of these special resources without settling in the terrain squares that contain them.

YOUR CIVILIZATION IS COMPRISED OF UNITS

To make it easier to manage your population, which extends out of its Home City to eventually cover large amounts of the game screen, Civilization divides your people into different types of individual *units* (graphic representations of citizens or military), each of which has its own responsibilities and capabilities.

Each unit occupies one square on the large game play map. During each turn, one unit at a time will become the active unit, which means you must issue it orders or tell it where to move.

**NOTE**

During a turn, you can select nonactive units and make them active by clicking on them (individually) with your mouse. (If you're playing the game without a mouse in DOS, use the Tab key to activate the cursor, then move the cursor around with the arrow keys to select units.)

Depending on its type, a unit will move a predetermined number of squares (or spaces) around the map. You determine in which direction a unit will move by using your mouse or arrow keys, unless the GoTo option (found under the orders pull-down menu on the Main Game screen) is selected. With the GoTo option, all you have to do is select the destination for the active unit (anywhere on the continent), and the

unit will automatically take the fastest route to that destination.

You can choose to keep an active unit stationary while you move other units, then return to move the first unit. To do this, press W (for Wait) on the keyboard. If you do not wish

to return to the active unit during the current turn, press the space bar.

TIP

As a rule, building and using Roads and Railroads enables units to travel greater distances each time they become active.

It is also possible for multiple units—for example, two Chariot units—to share one square on the map. Some units even re-

quire that other units share their space—a ship or an aircraft, for example, carries other units (such as Caravans, Diplomats, and military units) via the oceans or rivers to other land masses and continents. If you have more than one unit in a square and an enemy unit successfully attacks, all of your units on that square will be destroyed. (This does not apply to units located in your cities.)

TYPES OF UNITS

The following is a roundup of the types of units that you will be able to create and manage during a game. As your civilization expands, you

could easily create dozens, perhaps hundreds, of different units. While there is no limit to the number of each type of unit you can create, you'll want to develop a

TIP

To conserve resources and funds, be sure to dissolve any unneeded or outdated units as your civilization expands and evolves.



well-rounded civilization (comprised of different types of Caravans, Settlers, and Diplomats) that is protected by the best, most advanced military units currently available.

NONMILITARY UNITS

Much of your job as the ruler of your civilization involves managing and building your military. In order to expand your civilization (without military conquests), however, you must create Settlers. Diplomats will also come in handy when you must manage foreign affairs without fighting. Finally, Caravans can be used by large cities to lend their resources to other cities that are building Wonders of the World. Thus, nonmilitary units can be used quite effectively for growth and expansion in a simulation.

Settlers At the very start of Civilization, your population consists of a small group of nomadic Settlers, who found your capital (first) city. In order for the civilization to expand after the first city is formed, you must create additional groups of Settlers by selecting Settlers from the Production window on the City screen (as shown here in DOS).

In addition to founding cities, Settlers build irrigation systems, fortresses, roads, railroads, and mines for their Home City; they later clean up polluted areas one square at a time.

Diplomats When it comes to foreign affairs (both in times of peace and war), having Diplomats can provide you with vast information about foreign countries. Diplomats can open trade routes or act as ambassadors,





saboteurs, or special intelligence agents, depending on the current situation and the decisions you make for them. When you explore other lands and foreign cities, it's an excellent idea to send along a Diplomat.

Diplomats can travel on most types of boats or planes. You will find that Diplomats and Caravans (for trading) can enter foreign cities easily, without having to attack them first.

Caravans When you're ready to establish trade routes with foreign countries and other friendly cities, you must create Caravans to transport goods or supplies to be traded or sold. Trade between two cities within the same civilization (domestic trade) is also possible if the two cities are located a good distance apart. When a new trade route is established between foreign or domestic cities, the city that initiated the trade route will instantly reap the financial rewards and receive ongoing financial benefits.

MILITARY UNITS

At the core of every civilization you create must be a strong (but not necessarily large) military, which can protect your cities and help you expand. Of course, the power of your military will be tested should your civilization enter a war.

The following sections outline the various military units available in

Civilization. Alongside the name of each unit are two graphic icons. The one on the left is the DOS icon for that unit; the one on the right is the Windows icon. Some of these are virtually identical, while some look quite different.

NOTE

Just about any military unit can be fortified using the Fortify command from the Orders pull-down menu. As a fortified unit, its defensive strength increases by 50%. Thus, it is wise to fortify a unit that is defending a city. Keep in mind, though, that a fortified unit cannot launch an attack. To reactivate a fortified unit, simply click the mouse on that unit and then choose Reactivate. A unit will remain fortified until an enemy unit approaches or until you unfortify it manually.

Militia and Phalanx Units: Your First Defense

In the early part of the game, the only military unit available to each city is an ordinary Militia unit. Later, Phalanx units become available, and, still later, more powerful types.



Militia A Militia unit is generally made up of a small portion of your population armed with relatively small weapons. A Militia unit can move one space per turn. When you assign a city to create Militia units early in a simulation, a new unit can be created every ten turns. Later, it will take ten resources to build, so for larger cities with great resources, this type of unit can be built faster. A Militia unit can be fortified to provide a city with a bit of extra protection, but that fortified unit cannot move unless it is unfortified and reactivated.

When you establish a city early in the game, you'll want to protect it with at least two or three Militia units that are fortified. Units produced later can then explore, expanding your civilization.

Ideally, you'll want to upgrade your military by creating more powerful military units as soon as possible and by disbanding outdated units to conserve resources and finances.

Phalanx After the Militia unit, the next step up on the military scale is the Phalanx unit, which are a bit stronger from a defensive standpoint. Like Militia units, Phalanx units can move just one space per turn; however, it takes twice as many resources to create a Phalanx unit. Additionally, your civilization must have obtained the Bronze Working Advance before the first Phalanx unit can be created.

Building Military Strength

In later stages of the game, when a new city is being created close to an established, well-protected one, you can immediately assign the new city to

TIP

As a general rule, the more powerful the military unit, the more resources it takes to create or purchase. While you may wish to create a large number of military units, you should consider whether or not you would be better served by a smaller number of stronger (more powerful) units.

TIP

After one or two Phalanx units have been created, fortify them and have them replace the fortified Militia units currently protecting your city (or cities). Then, because the city is better protected, you can either reactivate the Militia units and use them for exploration or disband them (if you have alternate units that can be used for exploration).



TIP

Along with military units, an excellent way to protect a city is to build City Walls, especially for cities located near the water. Barbarians can attack cities by approaching them from the water, and City Walls offer much better protection than basic fortification. See the City Improvements section later in this chapter for more on City Walls.

create more powerful military or non-military units (which take additional turns and greater resources to create). If two cities are founded too close together, however, they could abuse the nearby resources, which could lead to problems with food production and the like.

In addition to Militia and Phalanx units, over twenty other types of military units will become available as the simulation progresses. To be successful in managing and expanding your civilization, you will not necessarily have to use every one of these military units. By the middle stages of the simulation, the types of units you require will depend on your decisions and objectives.

More Powerful Military Units

As the game progresses, it can be difficult to keep track of your military units. To determine what military units you have built or are building, consult your Military Advisor (shown here in DOS) by pressing Alt+A or clicking on the Advisors menu with your mouse and then selecting the Military Advisor option. Following is a brief description of each of the more powerful military units.

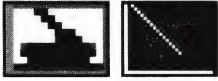
MILITARY STATUS				
Empire of the Romans				
Emperor: Caesar: 740 BC				
	Militia	(1/1/1)	6 active	
	Phalanx	(1/2/1)	7 active	
	Legion	(3/1/1)	2 active	1 in prod
	Cavalry	(2/1/2)	4 active	
	Catapult	(6/1/1)	5 active	
	Chariot	(4/1/2)	2 active	

A armor When it comes to extra maneuverability (up to three spaces during each turn), Armor units (tank forces) are excellent for launching ground-based attacks. (The Automobile Advancement is required.)

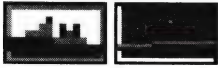




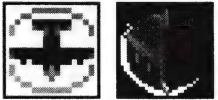
Artillery Because it has a good offensive and defensive rating in the game, this military unit provides vast power but takes a lot of resources to manufacture. If a foreign city is protected by City Walls, use Artillery to shoot over the walls. (The Robotic Advancement is required.)



Battleship Ideal for defeating other ships or shooting from water to land, these units have an extremely strong defense rating but can't carry or transport other units. (The Steel Advancement is required.)



Bomber These aircraft have limited range (in that they can't move very many squares in a turn), but they can be used for launching powerful air-based attacks. Bombers won't be available to you until the later stages of the game. (The Advanced Flight Advancement is required.)



Cannon In the middle stages of the simulation, after the Metallurgy Advancement is obtained, Cannon units can be used for launching powerful land-based attacks.



Carrier Once you have obtained the Advanced Flight Advancement, you're on your way to building a powerful air force. A Carrier is a water-based unit that can be used as a mobile base for Bombers, Fighters, and other aircraft.

**NOTE**

For additional information about each type of military unit, see the reference charts in Chapter 9.

TIP

If you discover that your initial cities are located on an island, you'll want to follow a development plan that allows you to build ships early on. Ships can only be launched if they are built by a city located adjacent to water. To increase the power of your navy, build a Lighthouse and/or Magellan's Expedition.

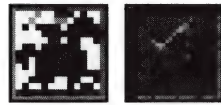


Catapult



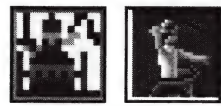
If you choose to pursue the Mathematics Advancement in the early stages of the simulation, your city or cities will have the capability to build Catapults, which are excellent for defensive and offensive military maneuvers. These units have a high offensive rating and are relatively inexpensive (in terms of resources) to build, yet they will prove extremely valuable when it comes to battle against rival civilizations or barbarians.

Cavalry



The major advantage to launching a horseback Cavalry unit is its ability to travel quickly. (As you may have guessed, the Horseback Riding Advancement is required.)

Chariot



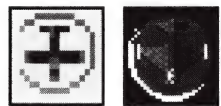
Upon discovering the Wheel (an Advancement you should acquire early on) you will discover that Chariots are great for launching attacks, for defense, and for exploration.

Cruiser



Like the Battleship, the Cruiser is a powerful ship that can travel great distances (up to six spaces) during a single turn. (The Combustion Advancement is required.)

Fighter



This unit, representing fighter planes, must return to a base after each turn, but it can move ten spaces during a turn. In the early stages of flight, Fighters are a powerful resource for establishing an air force. (The Flight Advancement is required.)

TIP

On ships that can carry other units, try to place at least one ground-based unit that can be used to explore new land masses you discover. Based on what you find, you can later transport additional military units, Caravans, or Diplomats.

Frigate



For fairly early sea exploration (or travel over water to reach other lands), a Frigate unit can move quickly and carry other military or nonmilitary units. (The Magnetism Advancement is required.)



Ironclad If you're forced to enter ship-to-ship battles, Ironclads will give you a powerful advantage. These ships can move up to four squares per move. (The Steam Engine Advancement is required.)



Knights In the earlier stages of your civilization's development, while still in ancient and medieval times, Knights can be used for offense and defense (after the Chivalry Advancement is obtained).



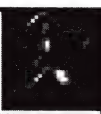
Legion After you have obtained the Iron Working Advancement, creating Legions (groups of armed soldiers) offers a cheap, fast method of building up your ground-based army. Legion units offer decent defense strength but can only move one square per turn.



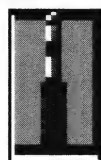
Mechanized Infantry In terms of ground forces, you can't beat a Mechanized Infantry unit for offensive and defensive strength. They can travel up to three spaces per turn but require a significant amount of resources to build. (The Labor Union Advancement is required.)



Musketeers Upon the discovery of the Gunpowder Advancement, Musketeers outdate and can replace Militia and Phalanx units that are being used to defend cities and other areas. Because they are armed with guns, Musketeers offer better offensive and defensive strengths than Militia or Phalanx units.

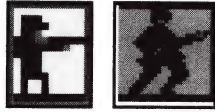


Nuclear The ultimate offensive attack capability, the use of Nuclear weapons, gives you extreme power. Nuclear missiles, which are transportable, can be built only after Rocketry and Nuclear Fission have been discovered and the Manhattan Project Wonder of the World has been built by a civilization.





Riflemen Because rifles are more accurate and advanced than muskets, this type of military unit is the next step up from Musketeers in terms of ground forces. (The Conscription Advancement is required.)



Sail The first reliable type of naval ship available to you will probably be the basic sailing ship. (The less reliable Triremes sink if they get too far from land.) This Sail unit can be used to explore uncharted waters or to transport a limited number of units (per trip) to other land masses. (The Navigation Advancement is required.)



Submarine For advanced ship-to-ship battles, Submarines offer special advantages: it is hard for enemy ships to detect them, and they have strong offensive and defensive ratings. Submarines cannot transport other units. (The Mass Production Advancement is required.)



Transport When you are ready to plan an all-out attack on a foreign country located across water, a Transport unit can be used to carry up to eight other units. This type of ship can travel four spaces per turn. (The Industrialization Advancement is required.)



Trireme These small, early sailing ships are good for exploring coastline or transporting other units very short distances over water, but they often get lost at sea if they travel too far from land. Do not use these ships to transport key units over great distances—if a Trireme becomes lost, whatever other units it was carrying are also lost. (The Map Making Advancement is required.)





CITY IMPROVEMENTS

At any given time, a city's resources can be used to create a new unit or City Improvement. City Improvements can be used to enhance productivity or to better manage a city by offering the citizens a luxury (see Figure 6.2). While City Improvements can take many turns and a lot of resources to build, each offers a benefit to its Home City and/or to your civilization as a whole.

Each city can build only one of each type of Improvement. Once built, a City Improvement can be lost to sabotage, disaster, or capture. To raise funds quickly, a City Improvement can also be sold. To sell an Improvement, access the City screen and click on the Sell button in the City Improvements listing.

After building (or purchasing) a City Improvement, there is a predetermined fee charged per turn for managing it. If the city can't afford these ongoing fees, the Improvement will automatically be sold.

TIP

If your funds begin to run extremely low and a particular city can't afford to maintain its City Improvements, the game will automatically select an Improvement in that city to sell. Thus, to control which City Improvement gets sold when times are rough, decide in advance which less-needed Improvements you are willing to sell—do this before funds get low and the computer (acting on behalf of your citizens) reacts.

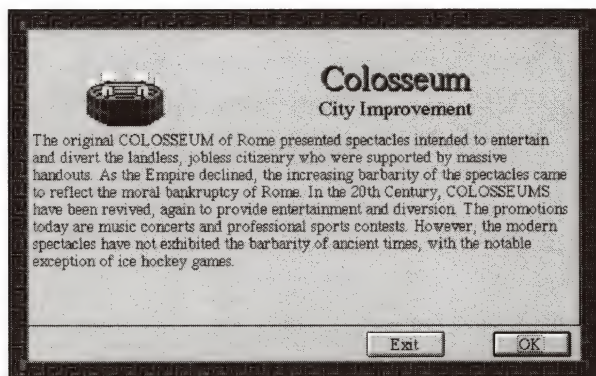
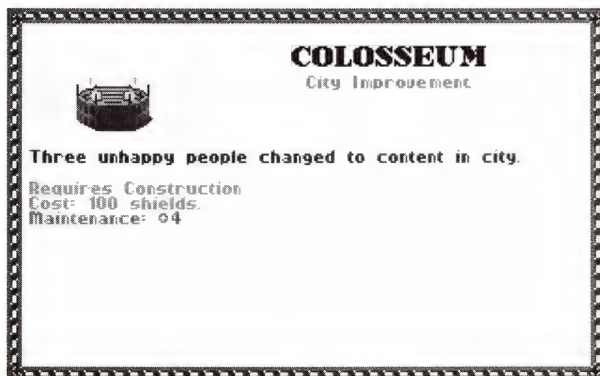


FIGURE 6.2 The DOS version (left) of Civilization offers essential information about City Improvements; the Windows version (right) offers useful tidbits of information as well.



THE TYPES OF CITY IMPROVEMENTS

Following is a description of each of the City Improvements. As with the military units, the graphic icons shown on the left are from the DOS version of the game, and the icons on the right are from the Windows version.

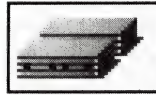
Aqueduct Building an Aqueduct will not only protect a city from randomly occurring disasters such as Fires and Plagues, but will also enhance irrigation and thus production, allowing the city population to expand. Cost: 120 resources, plus \$2.00 per turn to maintain.



Bank In Civilization, a Bank increases the effective use of taxes and luxuries by 50%. Before building a Bank, your city must first contain a Marketplace. Cost: 120 resources, plus \$3.00 per turn to maintain.



Barracks Early in the game, the first City Improvement you will have the opportunity to build is the military-related Barracks. Barracks require no extra knowledge or Advancements to build, and they are pretty cheap because they require no maintenance fees. They allow you to build Veteran units, which are 50% stronger than Militia units. Barracks also eliminate the threat of pirates (a “natural” disaster). You can sell this Improvement later, just before your civilization discovers Gunpowder and Combustion, since these Advances cause Barracks to become outdated. Cost: 20 resources, no maintenance.



Cathedral Once you have established Religion within a city, building a Cathedral is an excellent way to keep the population happy. Cost: 160 resources, plus \$3.00 per turn to maintain.





City Walls In addition to protecting the city from Floods (natural disasters), building City Walls triples the strength of a city's defending armies. This Improvement is ideal for protecting large, well-established cities that contain resources you especially do not want to lose in an attack. Cities with City Walls also don't lose population when defending units are destroyed. To build City Walls, you must first learn Masonry. Cost: 120 resources, plus \$2.00 per turn to maintain. (An excellent investment.)



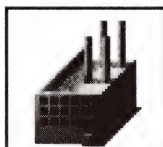
Colosseum Building a Colosseum will make a limited number of citizens happy. Because of its high building cost, a Colosseum is not the ideal Improvement to consider—other Improvements are cheaper and provide similar results. Cost: 100 resources, plus \$4.00 per turn to maintain.



Courthouse After you have developed a Code of Laws, you can reduce corruption by 50% simply by building a Courthouse, which represents an organized legal system with judges and police. Corruption is caused by a city's distance from the Palace; a courthouse is only necessary in cities far from your capital and only when you have a corrupt government type. (Democracy, for instance, eliminates all corruption, so a Courthouse is useless.) Cost: 80 resources, plus \$1.00 per turn to maintain. (Definitely a wise investment for those cities that are likely to experience corruption because of large populations and established trade routes.)

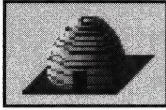
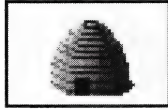


Factory By building a Factory, you can increase the resources produced within a city by 50%. A regular Factory becomes obsolete when a Manufacturing Plant is built. Cost: 200 resources, plus \$4.00 per turn to maintain.





Granary Every growing city should invest in a Granary (a building in which food is stored) as its population begins to increase. A Granary helps a city manage its food supply and prevent Famine. Since you'll want to build a Granary in your capital city early in the game, develop Pottery (a prerequisite) as soon as possible. Cost: 60 resources, plus \$1.00 per turn to maintain.



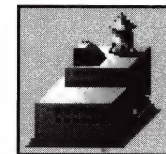
Hydro Plant Not only will a Hydro Plant (a water-powered energy source) allow the Factories and/or Manufacturing Plants in your cities to increase production, but it will also help to avoid pollution. You must first develop Electronics, then you'll be able to build a Hydro Plant. Cost: 240 resources, plus \$4.00 per turn to maintain.



Library If you're looking to increase the speed of scientific Advances, building a Library will help. You'll need to develop Writing first. Cost: 80 resources, plus \$1.00 per turn to maintain.

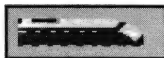


Manufacturing Plant Once you have acquired Robotics in the later stages of Civilization, you can build a Manufacturing Plant to increase resources created within a city by 100%. After a Manufacturing Plant is built, add a Hydro Plant to further increase productivity. Cost: 320 resources, plus \$6.00 per turn to maintain.



Marketplace Once your civilization has established Currency, you can build a Marketplace to boost tax revenue and luxuries by 50% (a definite advantage early in the game). Cost: 80 resources, plus \$1.00 per turn to maintain.



**Mass Transit** In later stages of the

simulation,

building a Mass

Transit system will help a city control pollution. Cost: 160 resources, plus \$4.00 per turn to maintain.

TIP

If you're trying to please your people, build Temples, Colosseums, and Cathedrals. To improve science and knowledge, building Libraries and Universities is an excellent investment.

Nuclear Plant Use a Nuclear Plant

to increase production of Factories and Manufacturing Plants by 50% while controlling pollution within the city. The drawback to a

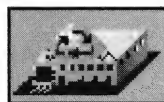
Nuclear Plant is the possibility of a nuclear meltdown if the people of the city become aggravated and civil disorder occurs. Cost: 160 resources, plus \$4.00 per turn to maintain.

Palace When your capital city is founded, so is your Palace. As your civilization expands, however, and cities are built at great distances from the Palace, corruption may take place. If a Palace is destroyed or needs to be moved (so as to better manage the entire civilization), there is a rebuilding cost of 200 resources. If you are a good leader, your population will automatically decide to build extensions to your Palace. There are no costs for the Palace or its extensions.

Power Plant Instead of a Nuclear Plant or Hydro Plant, you can

build a Power Plant. The problem with Power Plants is that they cause pollution. They do, however, increase the productivity of Facto-

ries and Manufacturing Plants by 50%. Cost: 160 resources, plus \$4.00 per turn to maintain.

Recycling Center When pollution becomes a problem within

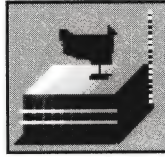
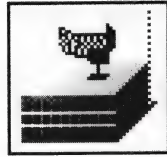
a city (and once the civilization has acquired the knowledge of Recycling), building a Recycling Center can reduce pollution by $\frac{2}{3}$. Recy-

cling Centers make excellent investments in later stages of the game.

Cost: 200 resources, plus \$2.00 per turn to maintain.



SDI (Strategic Defense Initiative) Defense

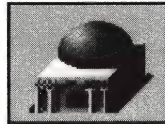


The real-life American public refers to this type of anti-nuclear weapon system as “Star Wars.”

Here in Civilization, SDI Defense is an important City Improvement late in the game when the nuclear race begins. Cost: 200 re-

sources, plus \$4.00 per turn to maintain.

Temple

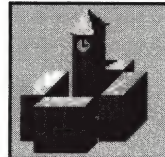
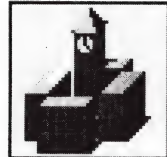


Building a Temple in Civilization will help to keep the

population happy while protecting them against the danger of volcanoes (a natural disaster) through the power of prayer (your people are religious folk). Temples have similar,

though not as great, effects as Cathedrals but can be built much earlier in the game. Cost: 40 resources, plus \$1.00 per turn to maintain.

University



Once you’ve built a Library and you’re looking to fur-

ther expand the knowledge of your people, you can build a University to increase knowledge by 50%. Before you build the University City Improvement, the University Advance-

ment must be acquired so you’ll know how to build the University. Cost: 160 resources, plus \$3.00 per turn to maintain.

WONDERS OF THE WORLD

When we look back in history, we view many accomplishments with awe. For example, the Great Pyramid was a massive project that em-

NOTE

When you build each Wonder, your empire will receive a new knowledge or capability. These were designed by the game’s developers and may seem somewhat arbitrary.

ployed what were then state-of-the-art building skills. Your civilization has the opportunity to build many great simulated Wonders of the World, each of which offers a major benefit to your society. In order to build each of the Wonders, your civilization must first have acquired the necessary



knowledge and skills (of Advancements and Improvements). Only then can the building process begin.

From a scoring standpoint, each Wonder of the World is worth a different number of points. See Chapter 12, “High Scorin’ Civilization Fun,” for more on scoring.

The twenty-one Wonders of the World in Civilization are broken up into three categories: antiquity, middle ages, and modern; however, these categories exist only to help you keep track of all the Wonders. As soon as your civilization acquires the necessary knowledge, a new era will begin automatically. If another civilization has beaten you to the building of a specific Wonder, you can launch a full-scale attack, capture the Wonder, and receive its benefits. Once built, some Wonders can provide powerful additional defenses to a city. Other Wonders are ideal for improving the morale and productivity of your population.

TIP

When a city is in the process of building a Wonder of the World, other cities within your civilization can lend their support by sending Caravans (which speed up the process) into the city building the Wonder. (To receive the Caravan’s assistance, you must accept the “Help Build Wonder” option.) Since it takes many turns to build a Wonder, you are investing in a city’s future when you assign it to build a Wonder—you won’t see immediate results.

WONDERS OF ANTIQUITY

Our pal Sid (the game’s creator) has grouped these Wonders of the World together because they took place in ancient times on Earth. They require the least amount of scientific knowledge.

Colossus Building this giant statue will increase trade revenue (once you have acquired Bronze Working knowledge), and will continue to benefit the city with increased trade revenue until Electricity is created. Cost: 200 resources.

Great Library Before your civilization develops a University, you can build a Great Library, which allows you to obtain any Advance that two other civilizations have learned. Cost: 300 resources.



Great Wall Until Gunpowder is discovered, building a Great Wall ensures that all foreign civilizations will offer you the option of peace. Thus, this City Improvement is ideal (once you have obtained the knowledge of Masonry) for civilizations looking to expand peacefully. Cost: 300 resources.

Hanging Gardens Once you have discovered Pottery, building Hanging Gardens will help to keep your population happy. Its effects, however, will become outdated once the knowledge of Invention is established. Cost: 300 resources.

Lighthouse If your civilization takes to the sea to expand or establish trade routes, building a Lighthouse (Figure 6.3) is an absolute must. This City Improvement allows ships to move faster and farther during each turn. The knowledge of Map Making is necessary to build a Lighthouse (which will remain operational until Magnetism is discovered). Cost: 200 resources.

Oracle Before formal Religion is established and after Mysticism is acquired, an Oracle can be used to keep the population happy. Cost: 300 resources.

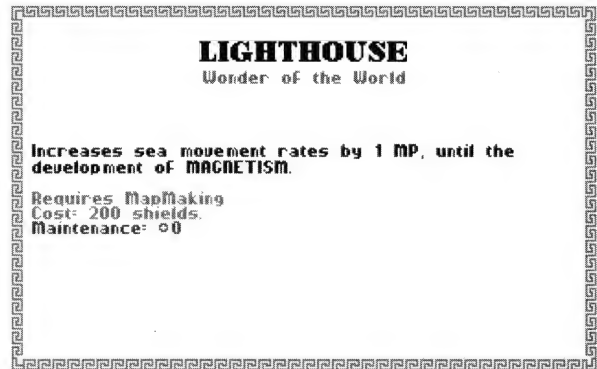
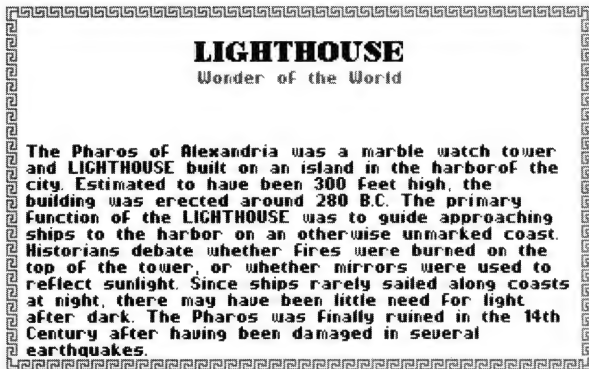


FIGURE 6.3 The Lighthouse Wonder of the World information screens (DOS version). The first screen describes the real-life history of the Wonder; the second explains the Wonder's effect on your empire and its maintenance cost.



Pyramids After developing Masonry skills, a city can build a Pyramid, which allows the civilization to change to any type of government even if the civilization does not have the necessary technological Advances. (This is a prime example of the game developers' arbitrariness in setting up the Wonders.) A Pyramid can also keep your government from entering a state of anarchy. Cost: 300 resources.

WONDERS OF THE MIDDLE AGES

The Wonders described in this section are more advanced and require more scientific knowledge than the Wonders of Antiquity.

Copernicus' Observatory If your civilization is in pursuit of knowledge, building this Wonder will double a city's knowledge production. An excellent strategy is first to build a Library and/or University, and/or to allocate extra Scientists, and then (after you have discovered Astronomy) to build this observatory. Cost: 300 resources.

Darwin's Voyage Obtaining this Wonder allows your civilization to take over any two Advances instantly; however, you must first have obtained the Railroads Advance. Cost: 300 resources.

Isaac Newton's College When used in conjunction with existing Libraries and Universities, Isaac Newton's College will increase your civilization's knowledge. Before construction begins on this Wonder, you must first have obtained the Theory of Gravity. The effect of this Wonder (increased knowledge—or more specifically, the ability of your scientists to work harder with greater results) continues until the development of Nuclear Fission. Cost: 400 resources.

J.S. Bach's Cathedral Upon establishing Religion, building this Cathedral is an excellent way to keep the population of your entire civilization happy. Cost: 400 resources.



Magellan's Expedition Civilizations that have begun to explore the seas will find that Magellan's Expedition offers boats and ships the ability to travel an additional square per turn. Before acquiring this Wonder, you must have developed Navigation. Cost: 400 resources.

TIP

To take advantage of this Wonder, you must first build Cathedrals. It is possible to obtain Michelangelo's Chapel before you have built Cathedrals; however, it will do you no good. The Chapel bonus disappears if you change to communist government.

Michelangelo's Chapel After Religion is established, Michelangelo's Chapel will help keep your population happy. Cost: 300 resources.

Shakespeare's Theatre After obtaining the knowledge of Medicine, you can ensure that your city's population will remain happy (and entertained) once

this Wonder is built. The effects of Shakespeare's Theatre on the population's happiness will continue until Electronics is invented. Cost: 400 resources.

MODERN WONDERS

The following is information about the more advanced Wonders of the World. To achieve your ultimate goal(s) in a simulation, you'll have to acquire some, if not all, of these Wonders. These Wonders of the World require vast amounts of knowledge, so they'll only be available late in a simulation.

Apollo Program In the later stages of a simulation, when your population is ready to trek into space, you must obtain the Apollo Program so that you can build spaceships. If your goal is to colonize space (as opposed to conquering the world), you simply *must* obtain this Wonder. Because this Wonder is symbolic of having a satellite, which would give you a broad overhead view of the explored and unexplored areas of the planet, gaining the Apollo Program gives you the ability to see the location of each city in the world on the small world map on the Main Game screen. Cost: 600 resources.



Cure for Cancer As your civilization advances into the future, you can invent the Cure for Cancer, which will also help to keep your population happy. Cost: 600 resources.

Hoover Dam This Wonder (see Figure 6.4) benefits all of the cities on a continent by supplying power without causing pollution. Additionally, the Hoover Dam increases resources generated by these cities by 50%. Cost: 600 resources.

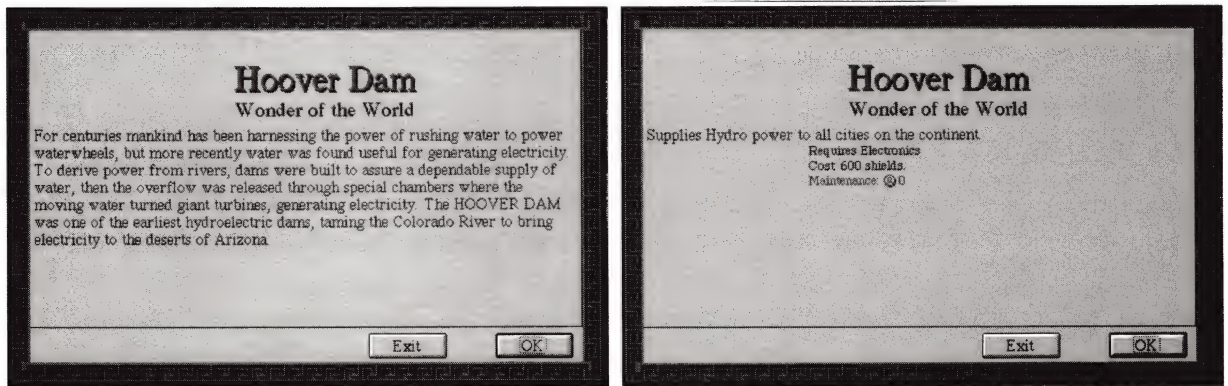


FIGURE 6.4 The Hoover Dam information screens (Windows version)

Manhattan Project After you obtain the knowledge of Nuclear Fission, you have access to the Manhattan Project, which allows your civilization to create nuclear weapons. However, once one city obtains this knowledge, it is available to all civilizations, including your enemies. Thus, a nuclear race could begin. Cost: 600 resources.

SETI Program This Wonder (which is based on NASA's search for alien life) increases knowledge generated in a city by 50% but can't be used until Computers are discovered. When you obtain the SETI Program, you will want to have plenty of Scientists on hand to take advantage of what this Wonder offers them. Cost: 600 resources.

TIP

You can obtain a Wonder (such as the SETI Program) at any time in the age in which it exists. However, if you lack some prerequisite for using it, why spend the resources to obtain it?



Women's Suffrage Obtaining Women's Suffrage is another way to help keep your population happy once you have discovered Industrialization. This Wonder works only if your civilization is governed as a republic or democracy. Cost: 600 resources.

United Nations After you have established communism, you can begin developing the United Nations. This Wonder gives you the opportunity to enter into peace treaties with any foreign countries you encounter. If you are currently involved in a war when this Wonder is achieved, you will have the opportunity to enter peace negotiations. In the later stages of the simulation, you'll want to avoid war so that you can concentrate your efforts on scientific research and on reaching space. Cost: 600 resources.

DEFINING A TURN

You might want to think of Civilization as an ultra-glorified game of chess. In chess, you play against one opponent, while in Civilization, you play against the computer (which represents several competing civilizations). And instead of moving chess pieces around a square board as in chess, in Civilization you move units around the computer-generated planet made up of squares. This aspect of the game is done in turns.

As you already know, your goal is to expertly manage and expand your civilization over time, helping it to evolve. In this game, a turn represents the passing of a period of time (twenty years in the early stages of the game, as little as one year later in the game). During each turn, you are given the opportunity to make decisions and to take action by manipulating the various units and altering the internal actions of each city as necessary.

NOTE

As each new turn begins, you must determine if your civilization has experienced growth and fix any weak areas in order to maintain a happy and stable society.

When you have manipulated each of the active units (and made other decisions that may be required), the turn ends. At this point, the computer reacts to your decisions

and determines both the result(s) of your actions on your own civilization and the responses of the other civilizations in your world. After the



computer has made its calculations, your next turn will begin. (Notice that time has passed.) In between your turns, other civilizations that are controlled by the computer will make their moves.

At the beginning of a new turn, you may encounter a natural disaster, such as a flash Flood or a widespread Fire. Unless your civilization has the technology to counteract these random natural occurrences, damage or destruction may take place.

NOTE

The natural (and random) disasters in Civilization include: Earthquakes, Volcanic Eruptions, Floods, Famine, Fire, Piracy, and Plagues. Certain City Improvements and Wonders of the World will help you defend your cities against these disasters.

CIVILIZATION IN A NUTSHELL

As you have probably deduced, Civilization is a highly complex simulation that requires you to plan ahead and make critical decisions that will have both long- and short-term results. Now that you are somewhat familiar with many of the options and commands available to you and can decipher what the various graphic icons on the game screens represent, you're in a good position to start experiencing what this game has to offer.

The following chapters include general and specific strategies and tips for creating and managing a successful civilization, along with valuable charts for planning strategies based on available City Improvements and achievements. A later chapter even describes a method for cheating in Civilization so that you can start the game with an extremely large treasury. (This cheat only works in the DOS version.)

If you're still a bit overwhelmed or confused after reading this initial introduction to Civilization, don't worry. Once you sit down to play, many aspects of the game will become clear with practice and a little common sense.

**A BEGINNER'S
TUTORIAL**

S E V E N



The best way to learn how to play Civilization is to look over the shoulder of an experienced player. In this chapter we'll explore the first set of turns of a Civilization simulation. To make it easier to follow, I'll refer to a specific simulation I experienced. Plenty of game screens have been included in this chapter, so you'll see what to expect when you try your own simulation.

No two simulations are ever identical, so don't try to duplicate the moves shown here—just think of it as an example. In the Chapter 8, "Civilization Strategies and Quick Tips," we'll cover some specific game play strategies.

This simulation was conducted using the DOS version of the game, so most of the screens you will see in this chapter are from the DOS version. Occasionally, Windows screens from other simulations are inserted for contrast.

NOTE

Events happen in this chapter in the order they occurred during this specific simulation. In simulations, these and other events may take place at different times, in different ways, and with different results.

STARTING THE GAME

To start the DOS version of the game, type **CIV** at the C:\MPS\ prompt. The graphics mode, sound mode, and input mode selection screens will appear; make the appropriate choices for your computer setup. To start the Windows version, load Windows, then double-click on the Civilization icon.



MAKING PREGAME CHOICES

At this point in both versions, the game's credits will appear on the screen in an animated sequence. Press any key and you will be sent to

NOTE

You can skip most of the opening credits and the story and start right in playing a new game by pressing *N* to select Start a New Game. (You could also press *L* to load a saved game, *E* to play a new game on Earth, or *C* to design a custom world, but you probably don't want to try those options yet.)

the main title screen. Select Start a New Game from the menu, and a picture of the galaxy will appear, along with the text "In the beginning," followed by Civilization's story. To skip ahead, press the space bar and you will be sent directly to the Difficulty Level screen.

At the Difficulty Level screen, choose the Chieftain option. Next, you'll be asked to choose a Level of Competition. Select

Three (3) Civilizations (the bottom menu option). This means that there will be two opponent civilizations in your simulation (your own civilization counts in the tally).

A subsequent menu will appear and you'll be asked to select the tribe you wish to rule. (If you had chosen more opponent civilizations, you'd have a larger selection of tribes to choose from.) In this simulation, we'll choose to

rule the Zulu tribe under the default leader name of Shaka.



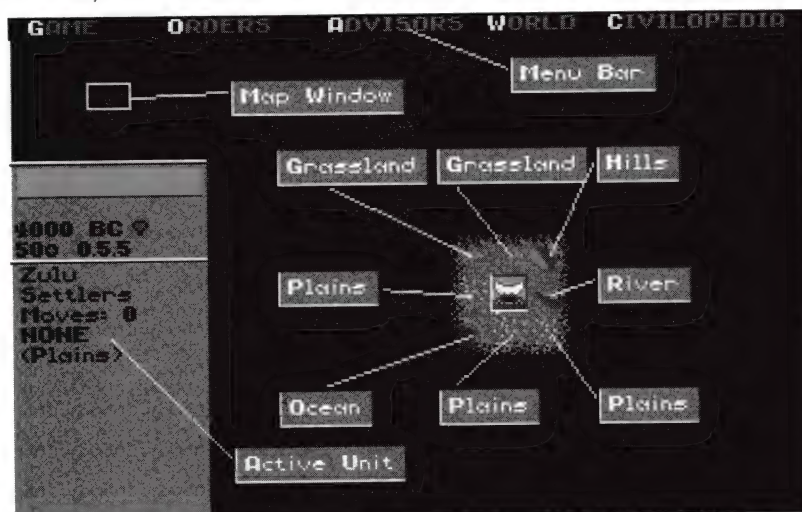


Following the completion of these pregame choices, an information screen will announce your name, your tribe, and what basic knowledge your tribe has managed to acquire. This knowledge won't be much, but it will provide the foundation upon which you, the leader of your empire, must build. In our simulation, the Zulus have discovered Irrigation, Mining, Ceremonial Burial, and Roads.



Shaka, you have risen to become leader of the Zulus. May your reign be long and prosperous. The Zulus have knowledge of Irrigation, Mining, Ceremonial Burial, and Roads.

The computer creates your planet, and a Main Game screen appears. At the start of a DOS simulation, the Main Game screen's major components are labeled. Take a moment to become familiar with the general layout of this game screen if you have not already done so. (Windows Civilization does not feature a labeled screen at the start of a simulation, but you can refer to one at the beginning of Chapter 5 of this book.)

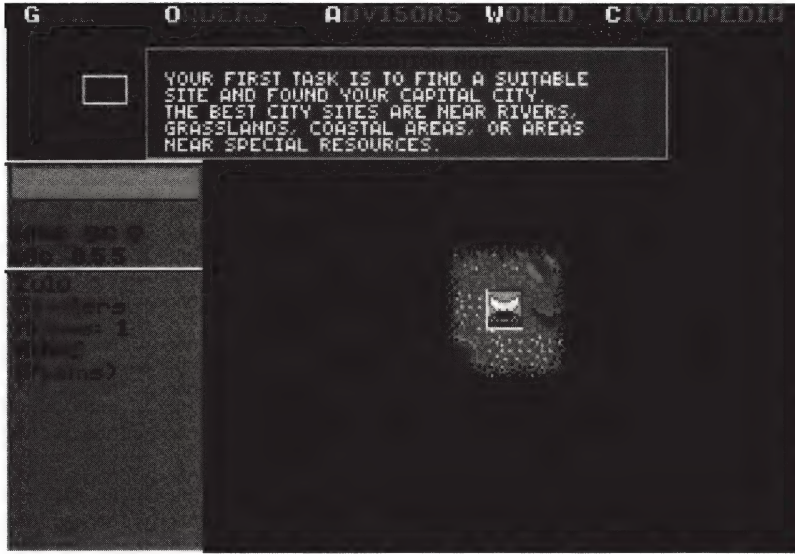


GETTING STARTED: 4000 B.C.

Look at the left portion of the Main Game screen and notice that the year is 4000 B.C. (every simulation begins on this date). Below the date you can see an indication of the amount of funds in the tribe's treasury and some information about the Tax Rate and Luxury Rate (at the start of each simulation, these rates will be set to their default values).



Below that, you can see information about the active unit; in this case, it's a group of Settlers from the Zulu tribe that will begin the



simulation in a Plains terrain square. (When you start your own simulation, it will always be with one Settlers unit, but the type of terrain may differ.) Press $\downarrow$ and you will find your small tribe of Settlers in the center of the screen. All of the land is unexplored, so you will see blackness everywhere in both the large and small maps. Since the Chieftain option was selected in this tutorial, help is offered in the form of an information window that

states your immediate goal: to locate a suitable location to found your capital city.

EXPLORING AND MEETING ANOTHER TRIBE

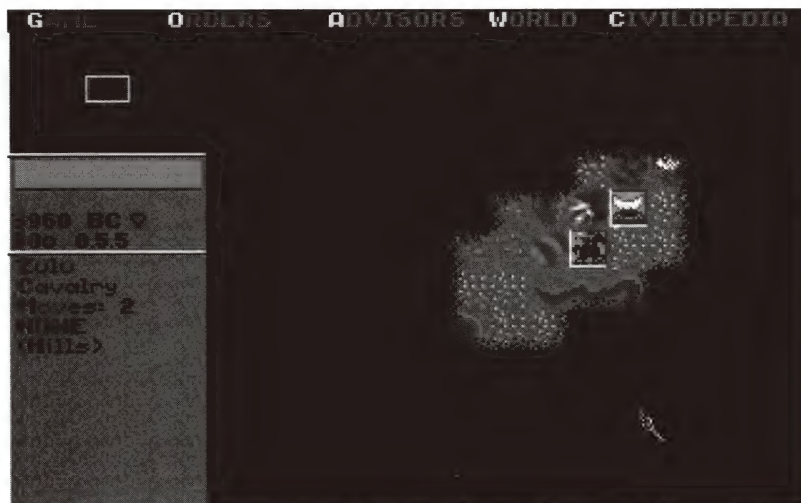
Your first turn is about to begin. You can move your Settlers in any direction you wish by pressing the directional arrows on the keyboard or using your mouse. In our simulation, we'll move in the upper-right diagonal direction; we discover a Random Terrain square that contains a small village.



When you see the Random Terrain square icon, move your Settlers to the square and you will discover just what it offers—maybe scientific knowledge or military forces you can use, or maybe a group of barbarians that will attack you. You also will have explored a small portion of the land around you.

In this case, the Zulu tribe has discovered a small, friendly tribe that wants to merge and share knowledge. By merging, the Zulu tribe has just taken its first step toward growth and has obtained one Cavalry unit in the process.

Normally, the tribe would have had to obtain the knowledge of Horseback Riding to build a Cavalry unit, but when the Zulus merged with the tribe found in the Random Terrain square, they acquired a single Cavalry unit without having the prerequisite knowledge. Now, as the Zulu Settlers spend the next several turns searching for a perfect location to found the capital city, they have a bit of military protection. (Note the Cavalry unit following the Settlers unit in the screen shown here.)



TIP

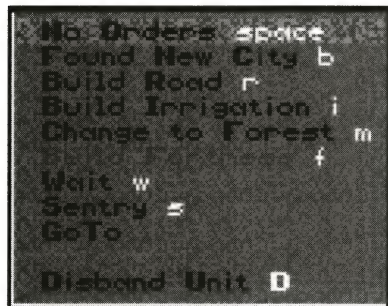
It's not usually a good idea to spend too many turns exploring with Settlers; in this case, however, only two other civilizations exist on the planet, so the chances of running into one of them are small.



Once again, because the Chieftain level was selected, information windows like this one appear periodically. In this case, the window recommends the Settlers' current location (on a Plains terrain square) as an ideal place to establish a city.

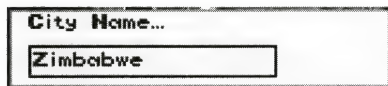
FOUNDING A CAPITAL CITY

To found the capital city (or any city) when the active unit is a Settlers unit, press



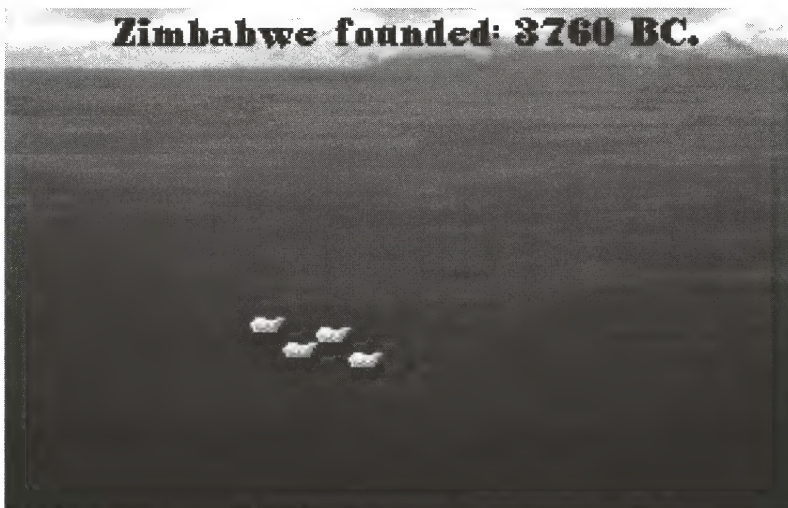
Alt+O to access the Orders pull-down menu and select the Found New City option. In this case, the local territory seems somewhat safe for the moment, so before founding the city we'll irrigate the land by selecting the Build Irrigation option from the Orders menu. Irrigation enhances a city's ability to grow food and maintain its population. If you choose to irrigate a terrain square, you must do so before founding a city on that square.

Now that the Settlers' terrain square has been irrigated, select the Found New City command. A default name for the new city will appear; however, you are free to type in your own city name. In this case, the Zulu's capital city will be called Zimbabwe.





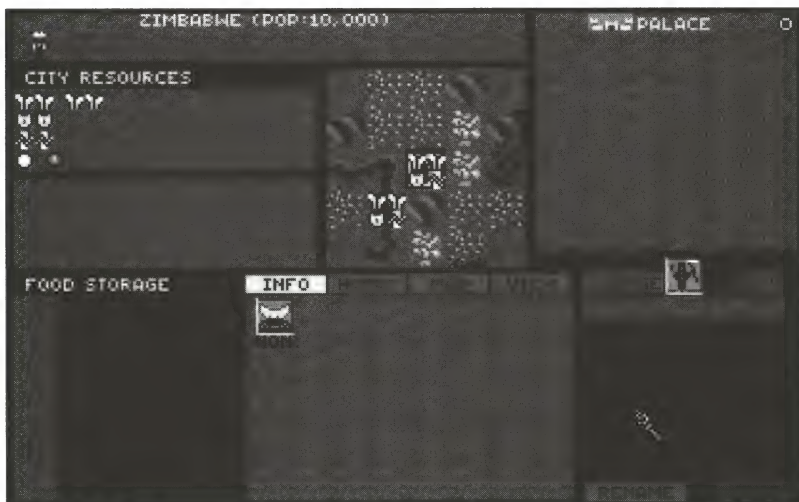
As a city is founded, an animated graphic sequence will show the settlers moving into the area, which was barren land until this point. Each time a City Improvement is built, you will see another animation sequence showing the city's growth. Notice that in our sample simulation the year is now 3760 B.C.



BUILDING CITY IMPROVEMENTS

The City screen, from which you assign the City Improvements you want your city to develop, will appear following the animation sequence. In our tutorial, the City Improvements listing in the upper-right portion of the City screen shows that the Palace for the empire has already been built—this happens automatically upon founding the capital city. The upper-left section of the City screen shows that the initial population of Zimbabwe is 10,000.

With the capital city formed, your immediate goal should be to establish a military. Its jobs will be first to defend the city and then to explore. The default option in the Production window is for the city to allocate its resources toward building Militia units.





After making sure that Zimbabwe is set to build new Militia units in our simulation, we'll return to the Main Game screen (by pressing ↵) and begin to use the existing Cavalry unit to explore over the next few turns while the city of Zimbabwe builds Militia units.

DEVELOPING NEW KNOWLEDGE

At the same time your city is busy building City Improvements, your civilization's Scientists will constantly work to develop new knowledge. The direction of that knowledge is entirely your choice. From time to time, the Science Advisor will check in with you to report their progress.

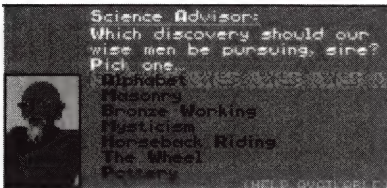
When new knowledge is acquired, you must assign the Scientists a new task. Each newly acquired knowledge leads to the ability to acquire

even more knowledge and to build more advanced City Improvements, additional Wonders of the World, and better military units. (See the reference charts in Chapter 9 for more information.)

The first time the Science Advisor appears, you must decide the path of knowledge you wish to pursue. Your initial choices determine which great knowledges can be acquired later. For example, to build additional Cavalry units, the Scientists must first acquire Horseback Riding. To build Chariots, knowledge of the Wheel must first be obtained. It can take several turns after you assign the Scientists the task of acquiring a new knowledge for the discovery to take place.

NOTE

The Science Advisor appears automatically each time a new knowledge is acquired, but you can contact him at any time using the Advisors pull-down menu.



NOTE

The on-screen messages advising you to make a certain move or decision can be helpful; however, you don't *have* to take the advice—you can choose to employ any strategy you like.

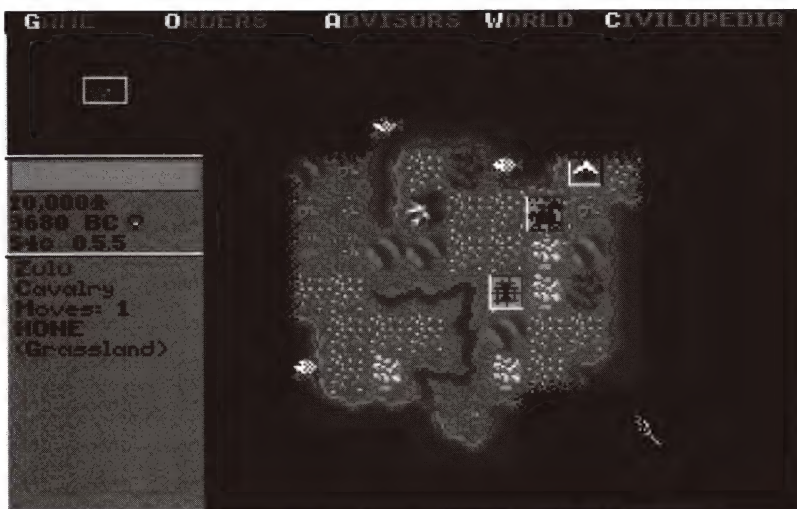
Although the Science Advisor in our simulation recommended pursuing the knowledge of Horseback Riding, we'll assign the Scientists to obtain the knowledge of Pottery so that the cities can build Granaries, which are vital for food storage.



CONTINUING TO EXPLORE AND TO BUILD A MILITARY

Meanwhile, Zimbabwe—now represented by a square graphic icon containing the number one—stands alone. A sole Cavalry unit (acquired in the merger) provides its protection; moving this Cavalry unit during each turn allows the civilization to continue its exploration. Thus, two major things are now taking place in the Zulu empire: Zimbabwe is building up a military by creating Militia units, and the Cavalry unit is exploring new territory with each passing turn.

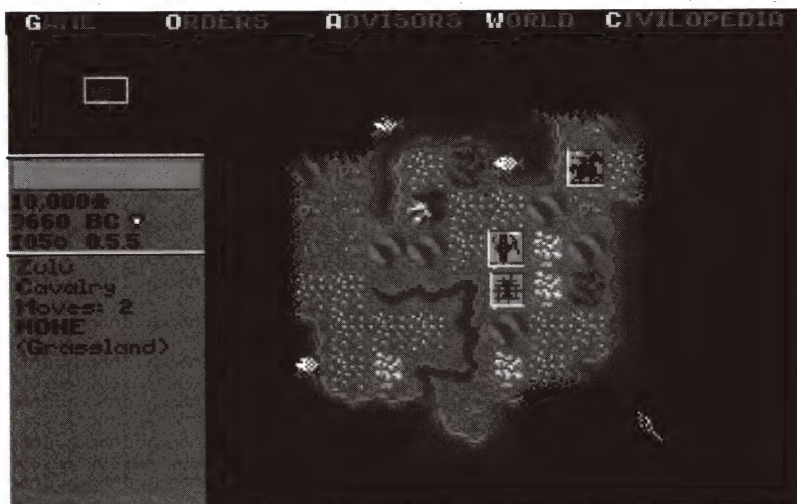
By the year 3680 B.C., the Zulu tribe's treasury has increased and the Cavalry unit's exploration of the area has turned up yet another Random Terrain square icon.



INCREASING THE TREASURY

The Random Terrain square yields metal deposits, which increase the Zulus' treasury. The additional funds resulting from this discovery can be used by Zimbabwe to acquire an additional unit, or they can be saved in the treasury for future use, which is what we'll do in this case.

After another turn passes, the city of Zimbabwe has





built its first Militia unit. Because metal deposits were discovered (and not spent), the treasury figure is now up to 105.

PROTECTING THE CITY BY FORTIFYING MILITARY UNITS

To protect the city, you'll want to fortify the new Militia unit in a square next to or inside the city. If you build a wall of fortified military units

NOTE

Remember—fortifying a unit increases its defense strength by 50% but renders it unmovable until you reactivate it.

around a city, plus have units within the city, it will be very well protected indeed.

To fortify the Militia unit, select the Fortify option from the Orders pull-down menu. While a unit is being fortified, the letter F appears



within it until the fortification process is complete, at which point the unit will be surrounded by a border made up of a dashed line.

While the Militia unit is being fortified, Zimbabwe continues to develop additional Militia units. (If no commands are given to change what the city should use its resources to build, it will build more Militia units.)



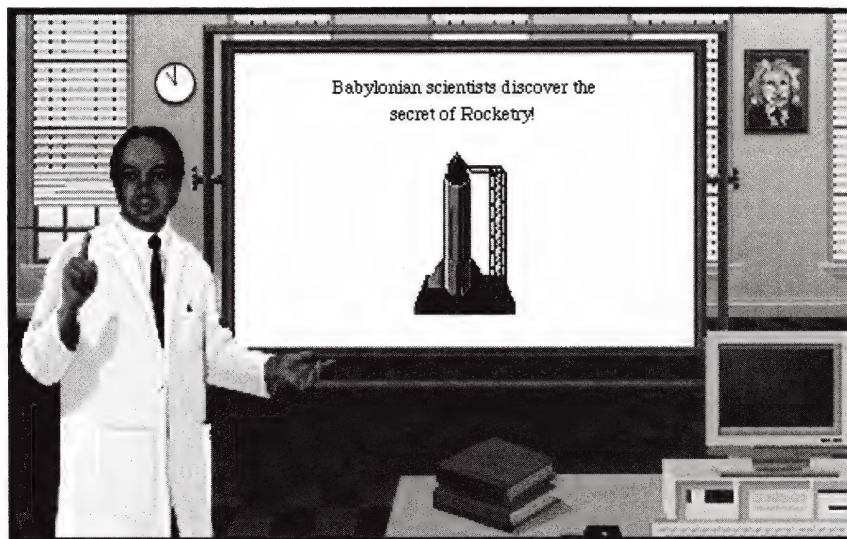
REALLOCATING CITY RESOURCES

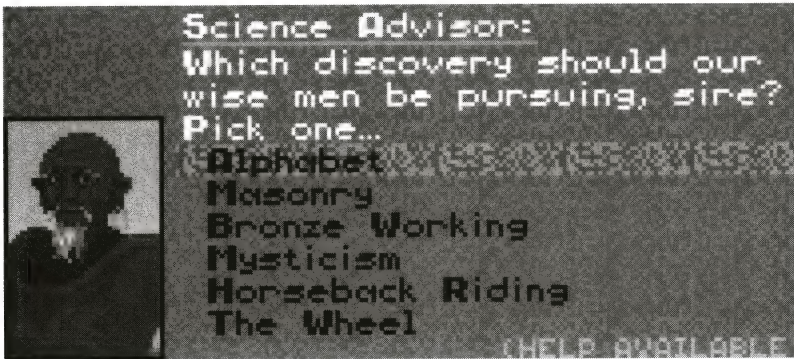
Meanwhile, the Zulu Scientists have announced that they have discovered the secret of Pottery. You are now able to allocate the city's resources to building a Granary rather than Militia units.



THE CHANGING LOOK OF YOUR SCIENTISTS

As your civilization evolves and time passes, your Scientists will become smarter and more modern, as shown here (Windows version).





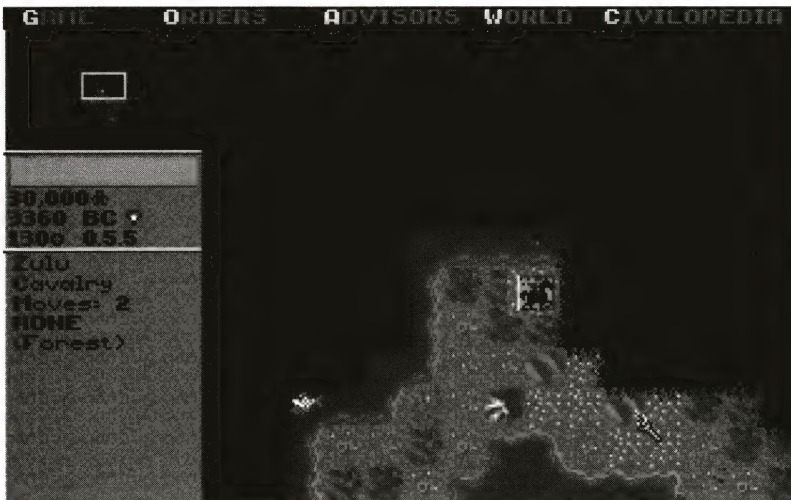
Once again, the Science Advisor asks which knowledge the Zulu Scientists should pursue. Because the Instant Advice option is activated, in the lower-left corner of the Main Game screen the Advisor recommends developing the Wheel so that Chariots can be built. In this simulation, however, we'll order the

Scientists to pursue Horseback Riding first by selecting it from the Science Advisor's menu.

CHECKING YOUR MAPS AND SCREENS

As turns take place, the Cavalry unit continues to explore. You can see quickly how much land has been explored by checking out the small

world map in the upper-left corner of the Main Game screen. Within the square on the small map is the active unit. The other small dot on the map represents the city of Zimbabwe.



From the information just below the small map, you can see that the year is 3360 B.C., the Zulus' population is 30,000, the treasury is at 130, and the active unit is the Cavalry unit, which is currently on a Forest terrain square. During

this turn, the Cavalry unit can move two spaces in any direction.



You can use the active unit(s) you have allocated for exploration (in this case, the Cavalry unit), to travel along the perimeter (coastline) of the land mass you occupy. This way, you can determine the size of the land mass and whether your civilization was founded on an island or a large continent. If you discover that your civilization is on a *small* island, you'll want to assign your Scientists to follow a path of knowledge that will quickly lead to the ability to build different types of ships.

TIP

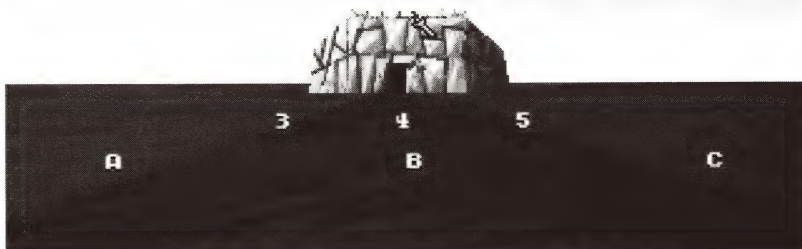
No matter what your ultimate goals in the game, you should make it a priority to discover Navigation (by obtaining the Alphabet and Map Making), so that you can explore the seas, establishing trade routes and embassies.

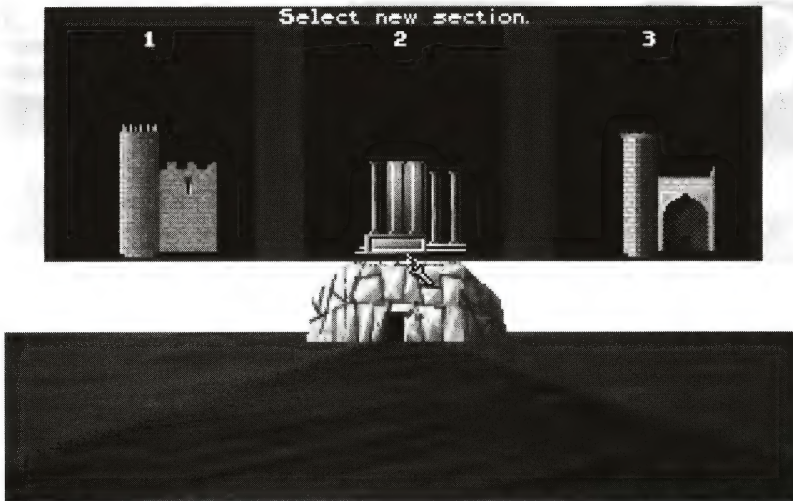
EXPANDING THE PALACE

Thus far in this simulation, the Zulu population has remained pleased with their leadership, so they've built an addition to the Palace. When such an event takes place (at random moments throughout the game), you must decide which portion of the Palace you wish to expand. This choice is made from a separate game screen like the one shown here. (When it's time for an addition, this window will automatically appear.)

To select which area of the Palace you wish to improve, simply press the appropriate number or letter on the keyboard. To build onto the left or right side of the Palace, select area 3 or 5. To improve upon the Palace's entrance, choose area 4. To improve the grounds, select area A, B, or C.

Which section shall we improve?





After you choose the area of the palace you wish to improve, you must select the type of architecture to be used. You'll be given three choices (shown here). Once you've made your selection, the Palace addition will be built automatically.

If you choose to improve the Palace grounds, the specific nature of the additions (trees, fences, statues, etc.) will be determined by the computer.

Following your selections, a short animation sequence will show the improvement being made to the Palace. Based on my selections in our simulation, the game places the third type of architecture on the left side of the Palace. After the animation sequence, game play resumes.





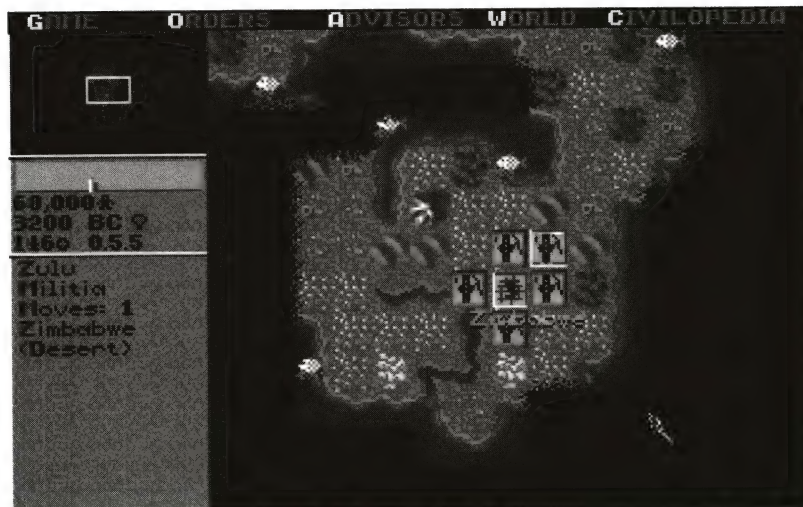
THE HAPPIER THE PEOPLE, THE NICER THE PALACE

If you keep your population happy, the people will help you build a large and fancy Palace (Windows version shown).



EXPANDING AND DEVELOPING YOUR CIVILIZATION: 3200 B.C.

The year is now 3200 B.C., and the Zulu population is up to 60,000 citizens. As time has passed, Scientists have discovered the knowledge of Horseback Riding. As shown on the next page, five Militia units have been created; four of them have been fortified to protect the city of



Zimbabwe, and the unfortified Militia unit can explore. (Meanwhile, the Cavalry unit we discovered at the beginning of the simulation is off exploring where we can't see it.)

EXPANDING YOUR CIVILIZATION

You must constantly expand your civilization by building new cities. To build additional cities, access the

City screen and press **C** or click on the Change button in the Production window. (In Windows, just click on the icon shown in the Production window in the City screen.) This will allow you to reallocate the city's resources and create an additional group of Settlers.

Notice that when the Change icon is activated, a menu asking "What shall we build in [City Name]?" appears. As your scientific knowledge grows and basic City Improvements are built, the list of possibilities increases. This menu lists those Improvements your civilization has the knowledge to build and offers information about the number of turns it will take to build each one.

BUYING IMPROVEMENTS

To speed up a city's internal expansion and building process, you can spend a portion of the treasury to *buy* an Improvement or unit. To do this in the DOS version of Civilization,

- 1** First click on the Change button and select the Improvement or unit you want from the "What shall we build..." menu that appears.
- 2** From this menu, highlight the item you want to buy by clicking on it with the mouse or using the directional arrows.



- 3** Click the mouse on the Buy icon (near the Change icon) or press **B** and the Improvement's price will be displayed.
- 4** If you have enough funds in your treasury and choose to spend them, activate the Buy option and then confirm your purchase decision. You will acquire the Improvement or unit you selected during your next turn.
- 5** If you don't wish to buy the item, select No when asked to confirm the purchase.

To buy a unit or Improvement in the Windows version,

- 1** Access the City pull-down menu (which is active only when the City Screen is shown) and select the Buy Unit option. Alternatively, you can press **B** on the keyboard when the City screen is visible.
- 2** A price list of available units and Improvements will appear. If you have enough money in your treasury, you'll be able to buy the unit or Improvement you want.
- 3** Select your choice with your mouse, then select Yes when asked to confirm your purchase decision and you will acquire that unit or Improvement during your next turn.
- 4** If you do not choose to buy the item, select No when asked to confirm your purchase decision.

In this simulation, we'll assign Zimbabwe to develop (not buy) additional Settler units, which will be used to establish new cities.

NAVIGATING THROUGH THE CIVILIZATION QUIZ

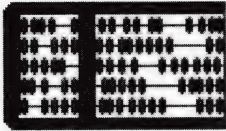
At this point, approximately fifty turns have taken place in the simulation, which means that the game's copy-protection scheme becomes activated and the Civilization Quiz appears. This scheme helps MicroProse Software ensure that their program is not being *pirated* (illegally duplicated and distributed).



CIVILIZATION QUIZ

A usurper claims that you are not the rightful king! To prove you are of royal birth you must answer this question:

Which civilization advances are required to learn the advance pictured below.



Flight and Electricity
Mysticism and Mathematics
Mathematics and Electronics
Masonry and Currency
Masonry and Monarchy
Alphabet and Masonry
Mathematics and Navigation
Chemistry and The Corporation
Physics and Invention
Mathematics and Philosophy

Pages 71-80

To continue, you'll need the original Civilization manual, which was packaged with the game. The Quiz screen will pose a question and refer to specific pages in the manual. Flip through the specified pages—in this case pages 71 through 80—and look for the icon shown on screen—in this case, the abacus icon.

When you find the icon, you'll discover the answer to the Quiz question. In our example, the correct answer is

that the Alphabet and Masonry Advances are required to learn the Mathematics Advance (graphically depicted by the abacus icon). If you answer the Quiz question correctly (you have two chances), game play continues.

SAVING THE GAME (AND CONTINUING TO PLAY)

The game's AutoSave option is selected by default, so the computer will periodically save your simulation's game data. In the DOS version of

Civilization, the screen shown here will appear, asking you which disk drive you want to store your data on. The default option is drive C: (the hard disk), which contains the MPS subdirectory. To save the game data and continue at this point, press ↵.

Which drive contains your
Save Game disk?

C:

Press drive letter and
Return when disk is inserted.
Press Escape to cancel.

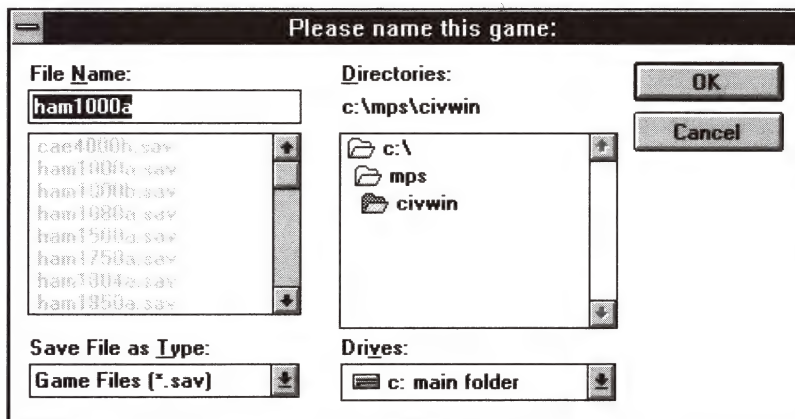
In the Windows version of Civilization, the window shown on the next page will appear, asking you to name the game. You can use the



default filename or create your own. (You can select a different disk drive to save the data on at the same time if you wish.) Click on the OK icon to continue.

Saving the game periodically is helpful because if you make drastic mistakes in later turns, you can end the simulation, reload earlier game data, and start again from that point in the game.

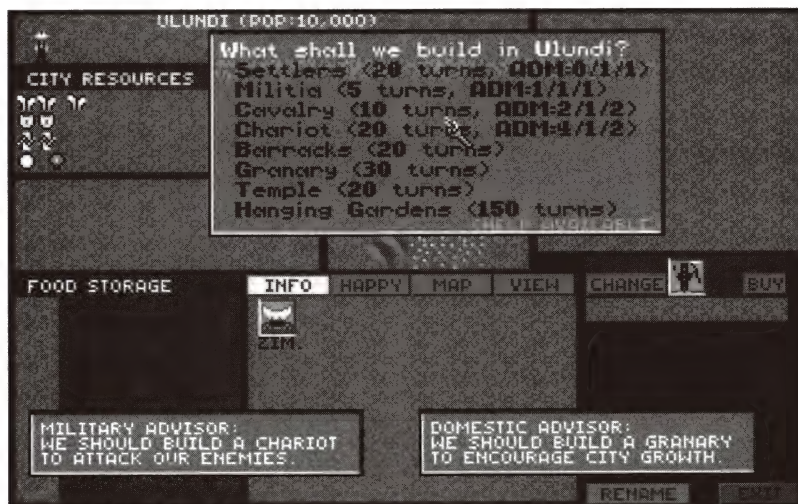
If you prefer to skip saving the game information and immediately return to game play, press Esc.



CONTINUING TO DEVELOP: 2800 B.C.

The year is now 2800 B.C. and a second city, Ulundi, has been created by the group of Settlers formed by Zimbabwe. Units that were assigned to explore the land have discovered that the Zulu tribe is based on a rather small island. Meanwhile, the resources of Ulundi have been assigned to build Chariot units, while the city of Zimbabwe continues to build new Settler units. Ulundi's City screen is shown here.

The Zulu empire is doing several things at once, as each





city's resources are allocated to accomplish separate tasks—which should ultimately help the empire as a whole achieve its goals. To quickly assess progress, press Alt+A or use your mouse to access the Advisors menu.

GETTING REPORTS FROM YOUR ADVISORS

Once you've accessed the Advisors menu, pressing F6 (in DOS) or Ctrl+6 (in Windows) allows you to request a report from the Science Advisor. (You can also use the

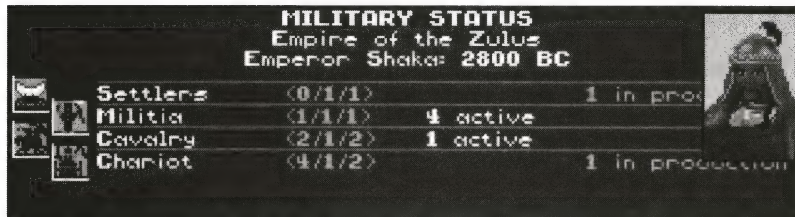
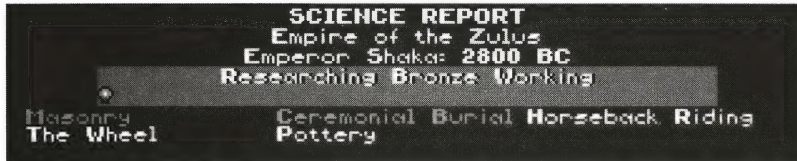
mouse or arrow keys to select Advisors.) In our tutorial, the Advisor states that the Scientists are researching the knowledge of Bronze Working

and that the Zulu empire has already acquired the knowledge of Pottery, Horseback Riding, the Wheel, Ceremonial Burial, and Masonry.

Notice that some of the items in this list are highlighted in white. These are the Advances your civilization discovered first.

To access the Military Advisor, press F2 (in DOS) or Ctrl+2 (in Windows) from the Advisors menu. The Military Advisor in this simulation

informs us that one group of Settlers is being developed, one Chariot unit is being built, and a total of four active Militia units and one active Cavalry unit now make up the civilization's military.

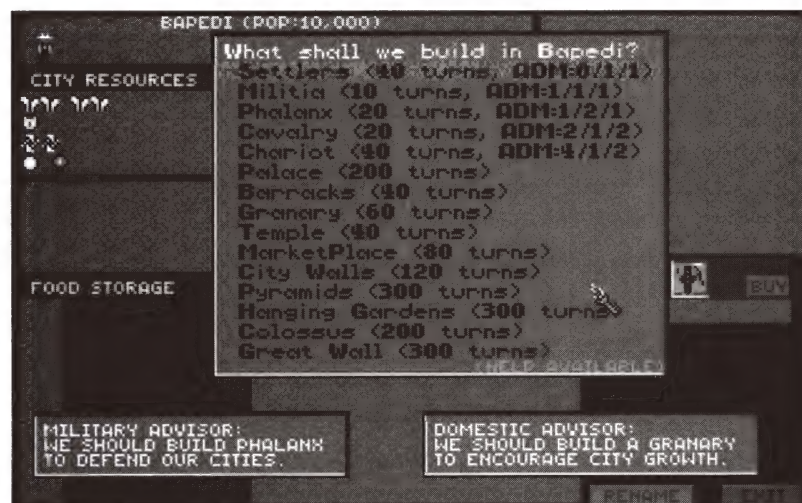
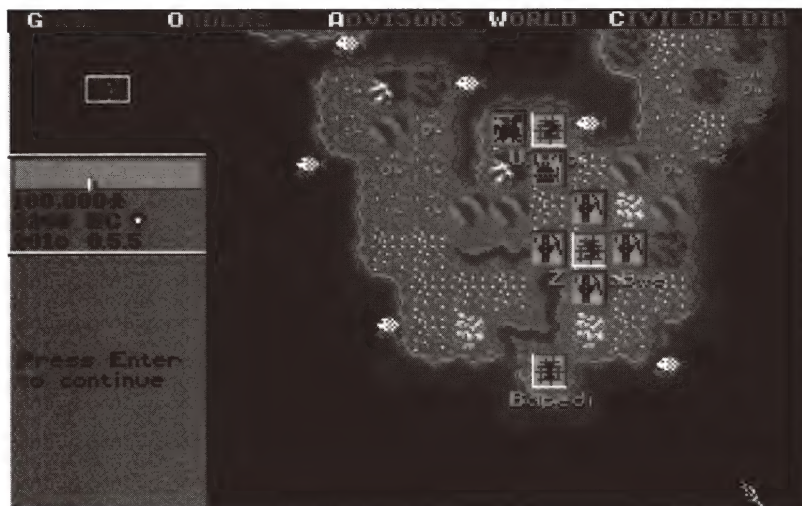




EXPANDING FURTHER

Multiple turns have taken place, and the simulation continues to progress. From the Main Game screen shown here, it's easy to see available units and where they are located. The Zulu population has now grown to 100,000 people, and Ulundi has built and fortified its first Chariot unit.

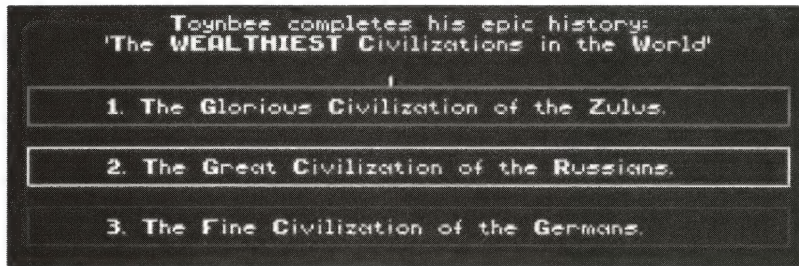
Zimbabwe has created another group of Settlers and they have formed a new city (the third in the Zulu empire), called Bapedi. Now that Bapedi has been founded, it is necessary to assign it a production task. Notice that the menu of available Improvements has grown, because the Zulu empire has acquired additional knowledge.





COMPARING YOUR CIVILIZATION TO OTHERS

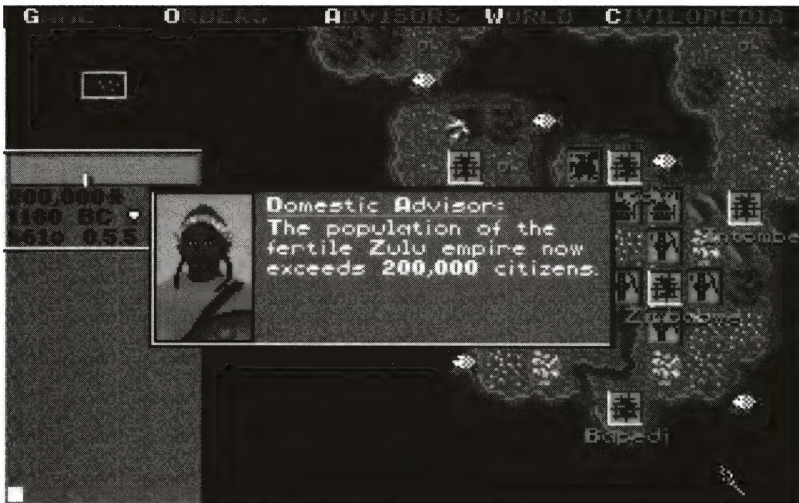
Civilization periodically provides an information screen that appears automatically and offers you data comparing your civilization to others



currently evolving on the planet. (These other civilizations are being controlled by the computer.) From this screen, we now find out that in this simulation, the Zulu empire is the wealthiest on the planet.

SURVIVING ATTACKS ON YOUR CIVILIZATION: 1180 B.C.

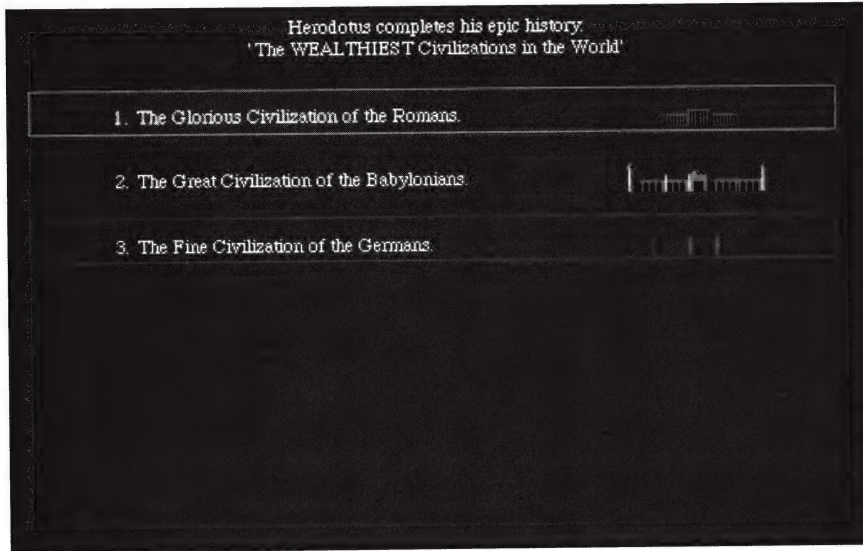
By the year 1180 B.C., the Zulu population has reached 200,000 and a total of six cities have been built, although only Zimbabwe and Ulundi are properly protected from surprise invasions. Zimbabwe continues to build new groups of Settlers, while Ulundi continues to build Chariot units.





GRAPHICS IN DOS AND WINDOWS

The Windows version of Civilization has generally better graphics than the DOS version. Compare the Windows "The WEALTHIEST Civilizations in the World" screen to the DOS one shown previously:



Although the two screens are basically the same, the Windows screen shows images of the different leaders' Palaces—a nice touch.



TIP

Of course, this attack could have been avoided easily if the city of Intombe had been protected by at least two or three military units.

city of Intombe. (The barbarian icons are red when they appear on the Main Game screen.)

By the time a Chariot unit from Ulundi can be activated (from fortified status) and moved toward Intombe, the city has already been invaded and captured by the barbarians. The result is the loss of Intombe as well as a decrease in the treasury.

Despite the fact that the Zulu empire lost the city of Intombe to the barbarians, the Chariot unit from Ulundi has managed to capture the barbarian leader and a handsome ransom is paid.





A THRIVING CIVILIZATION: 140 B.C.

As the year 140 B.C. arrives, the Zulu empire is stable, although not growing quickly. A check with the Science Advisor reveals twenty different knowledges that have been acquired (by the Scientists, through the discovery of secret scrolls, or through winning battles). The Zulu empire is well on its way to conquering the world and/or colonizing space.

CONTINUING A SUCCESSFUL SIMULATION: SOME TIPS

By now, each of the existing cities within the Zulu civilization is developing some type of City Improvement or Wonder of the World—for example, one city continues to generate Settlers for continued expansion, while another city builds military units to protect the empire.

JUGGLING TASKS

During your simulations, you'll want to assign tasks to each city that will help you in reaching the goal(s) you have set. Based on these goals, you must develop strategies, often taking into account several things at once. For example, one city could be dealing with a surprise attack by barbarians who have arrived by boat, another city could be building a Wonder of the World, and several more cities might be building Caravan units to lend support to the cities building Wonders. Meanwhile, you

SCIENCE REPORT		
Empire of the Zulus		
Emperor Shaka: 140 BC		
Researching The Republic		
Alphabet	Code of Laws	Currency
Map Making	Mathematics	Engineering
Masonry	Bronze Working	Iron Working
Bridge Building	Invention	Writing
Trade	Ceremonial Burial	Literacy
Horseback Riding	The Wheel	Gunpowder
Pottery	Construction	

TIP

Whenever barbarians raid, they always have a leader. If you can capture the leader, your empire will receive a ransom fee. To receive the ransom, it is important that the barbarian leader be alone (not protected by another unit) when he is captured. It is also possible to defeat both the barbarians and their leader in one attack (if they are sharing a terrain square), but then both units will be destroyed and no ransom will be paid.



may have a military unit, a Caravan, and a Diplomat exploring the seas via sailing vessel, looking to set up trade routes and an embassy with a foreign empire. During each turn, you must allocate the appropriate resources to each of these endeavors while determining the immediately appropriate action(s) of each active unit.

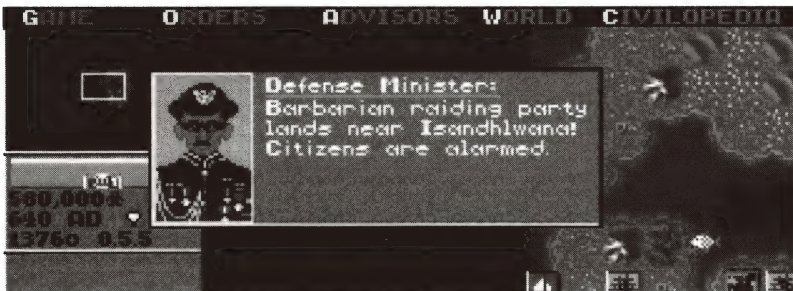
PROTECTING YOUR CITIES

When a city (such as Isandhlwana in our simulation) is located near the water, it is difficult to protect it from barbarians or enemies that at-

tack from the water. (Water-borne attacks such as the one shown here are common.)

Building a City Wall around the city is your best defense; however, this takes resources and special knowledges.

Until your empire has established a navy (or at least



built boats) you won't be able to get a good view of what lies in the water. If the waters near Isandhlwana had been explored by the Zulus, the barbarian attack would not have been as much of a surprise—Zulu military units could have been waiting on land to defend the city. (You never have much time to prepare for a barbarian attack, but with some exploration, the dark parts of the screen become visible, enabling you to see barbarians approaching for at least a turn or two.)

In the middle or later portions of a simulation, a city could contain a dozen or more City Improvements and/or a few Wonders of the World. As a specific city grows, it is vital that you protect that city against disasters and sudden attacks. After all, you don't want a Wonder to be lost or a trade route destroyed if a key city is suddenly raided.

To protect a key city, build a City Wall. You should also fortify the most modern type of military unit(s) you have around (or inside) the city. The City Walls will protect the city and all units within that city, not those that surround it. The units around the city provide a first line of defense against an attack. A well-managed city with established trade



routes and a handful of City Improvements will bring in extra income, which will allow you to achieve knowledge faster.

BUILDING A WELL-ROUNDED CITY

The screens shown in Figure 7.1 represent a well-rounded and established city. This city was created during a different simulation from the one we have been pursuing in this chapter, but it shows what can be done in one city within a civilization that is made up of multiple cities and dozens of units.

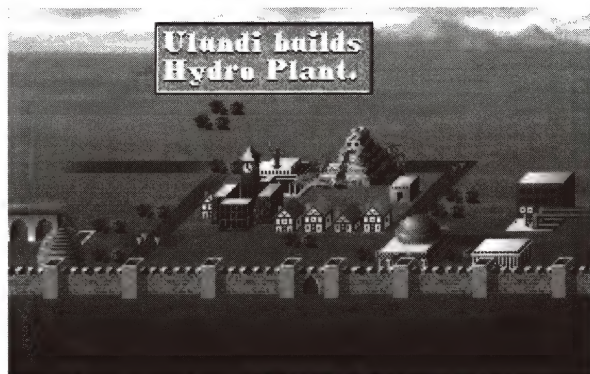


FIGURE 7.1 A well-developed city has many City Improvements, Wonders of the World, and other resources and is protected by City Walls.

MOVING ALONG

By now you should have a basic understanding of how to establish a capital city and start an ongoing growth pattern. Completing a simulation takes hundreds of turns with perhaps thousands of individual decisions. No two simulations can be identical, so a step-by-step guide wouldn't help much here.

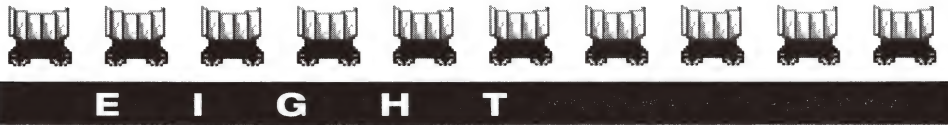
As your own simulation begins, keep in mind that everything works together or is somehow related. If you want to develop Flight (an early step toward space travel), some of the major knowledge Advancements that must be acquired are Ceremonial Burial, Mysticism, Astronomy, Navigation, and Physics. Only after all of these major knowledge Advancements have been acquired can Scientists offer your civilization the knowledge of Flight.



This may sound complicated, but by referring to the charts in Chapter 9, you can outline the advances in knowledge that will help your civilization build the appropriate City Improvements. Chapter 8 will introduce some general and specific strategies for winning Civilization.

**CIVILIZATION
STRATEGIES AND
QUICK TIPS**

E I G H T



To finish a simulation successfully, you must achieve one of two ultimate goals: conquering the world or colonizing Alpha Centauri in space (Figure 8.1). One of these goals must be chosen when you establish your capital city. Then, to achieve your goal, you have to create a workable plan and make progress as the years (turns) go on. Your decisions and actions during each turn will determine your empire's destiny. This chapter will give you a few hints from other players who have achieved their ultimate goals.

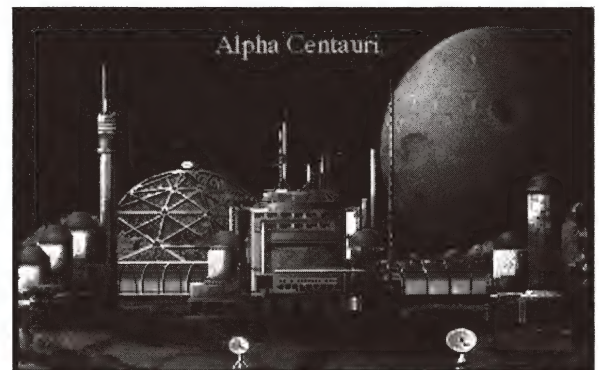


FIGURE 8.1 Your ultimate goal in *Civilization* is either to conquer the entire planet (left, DOS version) or to colonize Alpha Centauri (right, Windows version).

**WINDOWS****PLAYING CIVILIZATION,
WINDOWS VERSION**

While the programmers who adapted Civilization to the Windows operating system say that no changes were made to the game that would require different strategies from the DOS version, many players who have played both versions of the game believe that the Windows edition is more challenging. For example, it is quite possible that you'll encounter a greater number of Barbarians in the Windows version and that enemy cities will be a bit harder to destroy or take over. All of the strategies mentioned in this chapter will work when playing either the DOS or the Windows version, but don't be surprised if you encounter additional resistance when playing in Windows.

**BENEFITTING FROM THE
EXPERIENCE OF OTHER PLAYERS**

Unfortunately (or fortunately, if you enjoy a challenge), there is no predetermined path to ensure your empire's success, so the best way to judge the potential success of your strategy is to examine what has worked (and what hasn't) during other simulations.

Various on-line services, including CompuServe, America OnLine, Prodigy, and the MicroProse BBS (bulletin board system), offer interactive computer game forums where players can share their experiences and exchange information about their favorite games. Civilization has a large following of game players dedicated to discovering new ways of creating and managing successful Civilization empires.

NOTE

To access an on-line service, you'll need an optional modem and modem software, as well as an "account" for the on-line service.

In this chapter, you'll find detailed strategies and tips culled from postings on the on-line Civilization forums. They're not listed in any particular order; you can

incorporate the information within them into your own simulations as you wish.



CONQUERING THE WORLD: A STEP-BY-STEP STRATEGY

This strategy was developed for the Emperor level simulation and is intended to conquer the world.

SETTING GOALS

By A.D. 1880, the player who created this strategy had managed to conquer the world and receive a rating of 123%. (The percentage rating mentioned is one of the ways Civilization measures your success as a leader. See Chapter 12, "High Scorin' Civilization Fun," for more details on scoring.) To achieve this level of success, the player restored a saved game on three occasions (after unexpected disasters or barbarian raids had destroyed key elements in the simulation).

IMPLEMENTING THE STRATEGY

At the start of the simulation (after the pregame choices were made), the Tax Rate was set to 100% Science. Two militia units were created and then fortified to protect the capital city.

Once the simulation was underway and the first several turns had taken place, the Scientists were instructed to research first the Wheel and then Pottery. All funds were invested in research until these two Advances were discovered.

Moving on in the simulation, a second Militia unit was created, and then a few turns passed before the discovery of Pottery. Now a Granary could be built for food storage. Next the knowledge of the Wheel was discovered. This allowed for the building of Chariots (which can be used for exploration). During that time, Barracks were built within the capital city to give the military added strength by creating Veteran units.

The first step toward conquest was to locate the coastline and explore it. For now, the player left any Random Terrain squares

NOTE

Chariot units are vital for protecting the city against attack and for defeating other empires. Using Chariot units to invade foreign cities early in the game offers a very high chance of success, because newly founded cities are usually guarded by only a few Militia units, which a Chariot unit can defeat easily.

**NOTE**

You can always reallocate the city's resources from the City screen by using the Change option.

TIP

Taking the offense by using Chariot units and other military units to launch attacks (as opposed to signing peace treaties or otherwise coexisting with other civilizations) is an excellent way to acquire world dominance. When following this strategy, you should explore only those Random Terrain squares that are near foreign cities, because if you unleash barbarians there, they may actually help you by destroying the foreign cities.

(hut icons) that were close to the capital city or any other city untouched. (Exploring these Random Terrain squares might have released barbarians.)

One key to the success of this strategy was quickly conquering all rival cities located on the same continent as the player's capital city.

After one or two Chariot units were built for exploring and invading foreign cities on the same continent, the resources of the capital city were allocated to building additional groups of Settlers, which led to the formation of additional cities within the player's empire.

After enough time passed for the Scientists to research and discover Pottery, the Tax Rate was adjusted to 50% Tax, 50% Science, and the knowledge of Bronze Work-

ing was sought. Granaries (allowed by the knowledge of Pottery) were built in each city for food storage.

Meanwhile, the Scientists were hard at work seeking technological Advances, and the Chariot units were exploring and attacking any rival cities they encountered.

Once Barracks were built in one city, they were used to create Phalanx units. Each city was then fortified with at least one Phalanx unit.

TIP

It is no great loss if your Militia units are conquered when you unleash barbarians, because Militia units are cheap to create and easy to duplicate. Other military units, if lost, would take more time and resources to rebuild than Militia units.

Uncovering Random Terrain Squares

Remember those Random Terrain squares that were temporarily left untouched? Now, with Phalanx units protecting the cities and Chariot units in the field, Militia units were sent to explore the Random Terrain squares that were previously passed by.



In this strategy, Chariot units were the military force behind conquering the continent. Once the continent was under the empire's total control, all of the empire's resources were allocated to expansion, through the building of Settlers and Phalanx units.

Continuing in the strategy, as expansion took place, the Scientists were assigned to pursue the Pyramids Wonder of the World. Pyramids give you greater control over the various government types and allow for the government type to be changed, without going through a period of anarchy. With this Wonder, it is possible to switch to a form of government that will allow for faster growth and better overall production. (Had another Civilization discovered Pyramids first, the Observatory would have been a good second choice.) All of the other ancient Wonders of the World were ignored.

After the Pyramids were acquired in this simulation, Religion was acquired and Michelangelo's Chapel was pursued. Having religion will help keep the population happy.

As the middle portion of the sample strategy was reached, the Scientists continued to pursue the more modern Wonders of the World, including Newton's College, Bach's Cathedral, and Magellan's Expedition. As soon as the empire had the ability

NOTE

There is little danger if barbarians are unleashed from a Random Terrain square that is more than ten squares away from one of your Civilization's cities, because barbarians don't seem to travel far.

NOTE

Catapult units are also excellent for offense. If you launch a Catapult unit attack, it has a high chance of success. Enemy units that are less advanced than the Catapults will have a tough time destroying them.

NOTE

See Chapter 6, "The Elements of Civilization," for an explanation of the advantages of specific Wonders.

TIP

When selecting Wonders of the World to build, a good choice is to develop the Colossus Wonder early on, then build Courthouses. When you later change the form of government to republicanism, your empire will acquire Lightbulb icons (scientific development power) much faster and future Advancements will happen more quickly.

**TIP**

Once you have established Trade, it is useful for cities to build Caravans and to have the Caravan units travel to those cities that are building Wonders in order to lend support.

This can greatly speed up the process for building Wonders of the World and is the only method by which one city can assist another in development.

to pursue the most modern Wonders (such as the Apollo Program), resources were dedicated toward those goals instead of the soon-to-be outmoded Wonders.

In the sample strategy, Women's Suffrage was the most important Wonder in the later stages of the game—this Wonder of the World made it possible to mobilize a modern offensive while still maintaining a republic.

CONTINUING OPTIONS

The SETI Program and Hoover Dam are also important Wonders, especially if your civilization is based on a large continent. The SETI Program

increases the rate at which knowledge is acquired, while the Hoover Dam will generate more power and allow production of all cities on that continent to increase by 50%. After obtaining these Wonders, the Cure for Cancer should be sought after. Then, you can go back and obtain whatever other Wonders of the World remain from the Middle Ages.

NOTE

Once you're in the modern era, you can always go back and develop less advanced Wonders, since you have already obtained the knowledges required to build them.

TIP

From a technological standpoint, your civilization should pursue the Railroad (to speed up the movement of units around the continent) and Conscription (which allows you to build more advanced military units) early on.

Masonry, Construction, and Bridge Building are the major knowledge Advancements required to build Railroads. (See the charts in Chapter 9 for further details.) After the Railroad is obtained, each city on the home continent should be connected via Railroad before any units attempt to ex-

plore or attack beyond the home continent. Railroads allow you to quickly move large numbers of military units to other areas of the continent. Thus, you can be on the offensive, yet quickly develop a defensive strategy elsewhere if a surprise attack takes place.



Riflemen and Ironclad units are important defenses as the simulation progresses because they are more advanced military units that can replace less advanced units. Riflemen should replace Phalanxes and Musketeers, while Ironclads are excellent for mounting sea attacks (Ironclads can't transport other units).

After the home continent is conquered and when the time comes to expand further, you can build Temples and Cathedrals. You might also want to change the form of leadership (which will still have been set to the default option of despotism unless it was changed earlier). Building Temples and Cathedrals will help an expanding population remain happy, as will changing the form of government.

Before you can enter a democracy, you'll need the Pyramids in order to avoid entering into a temporary state of anarchy. One possible goal is to change to a democracy as soon as possible, based on when you have acquired the necessary knowledge. For managing a large population, this type of government offers the most benefits.

MOVING ALONG IN THE SAMPLE SIMULATION

At this point (very close to the modern era), the Scientists were assigned to obtaining Robotics and then building Manufacturing Plants in all of the major cities. Now—because the player continued to gain knowledge and build City Improvements and Wonders of the World—the empire has grown strong and large enough to spread outward to other continents.

The player built as many Bombers as possible and switched to a republic when the population started to become unhappy. At this point, Women's Suffrage was an absolute must! (This Wonder helps to keep the population happy. Under a republic or democracy, units that are away from their Home City won't create unhappy citizens once this Wonder is achieved.)

NOTE

As an empire grows, it becomes more difficult to keep the population happy, although the player might not be doing anything wrong in particular.



The player built Carrier, Transport, and Battleship units to begin a conquest of foreign continents. First, a Diplomat was sent to determine the strength of the enemy, then Battleships were sent to destroy any foreign coastal cities that did not have City Walls. (Cities without City Walls require less strength and units to conquer.) Once the coastal cities were beaten, the army (made up of Riflemen and other military units) was loaded into Carriers and Transports and sent across seas to invade foreign continents.

As Riflemen invaded the foreign beaches and reached enemy cities, they were temporarily fortified. The player started the attack by blasting

NOTE

For added strength, you may also want to develop and send along Artillery (one of the strongest types of military units) to assist in a ground-based assault.

each rival city with Bombers until its defenses were worn down, then reactivated the ground-based Riflemen troops and sent them in. Another strategy is to use Battleships to eliminate all the troops defending a coastal city, then send in troops. (Battleships get *multiple* attacks per turn.)

The player repeated this procedure on each foreign continent, conquering them one at a time, until worldwide domination was achieved.

TIP

Overall, about 80% of your resources should be allocated throughout the game toward the development of technology, which affects military strength. Using the military you develop in this way will be a key toward obtaining world domination (and winning the game).

While the sample strategy presented here for conquering the world is sound, your personal decisions combined with random events during each turn may have varying results. With practice, using this overall strategy combined with the tips and strategies that follow will ultimately lead to your success.

CONQUERING THE WORLD, TAKE TWO: ANOTHER STRATEGY

The following strategy was developed by a player playing at the Chieftan level with seven civilizations on the planet.



First, build the Colossus as early in the game as possible after the capital city is founded and protected.

Next, increase trade for that city so that the city's wealth and scientific efforts will increase. Keep building up the capital city until the number in the center of the capital city box (on the Main Game screen) reaches four. Then, create Settlers and have them build additional cities and roads between the cities.

From a military standpoint, you'll want to build as many Chariot units as possible and use them to conquer your continent. This can be done by establishing additional cities and allocating their resources toward building Chariots.

While this is taking place, have your Scientists pursue the following Advances (in this order):

- 1** Pottery (to build Granaries)
- 2** The Wheel (to build Chariots and Aqueducts)
- 3** Bronze Working (for Phalanx units, Currency, and the Colossus Wonder of the World)
- 4** Sail (to be able to travel across the oceans and to obtain the Magellan's Expedition Wonder)
- 5** Invention (which leads to the Steam Engine and the ability to build Ironclads, Railroads, and Gunpowder)
- 6** Railroads (to increase food and resources for cities connected with a rail system and to obtain Darwin's Voyage)
- 7** Gunpowder (for Musketeers)
- 8** Electronics (which leads to the Hoover Dam Wonder and the Hydro Plant Improvement)
- 9** Banking (to increase by 50% the luxuries and taxes generated by a city)
- 10** Automobile (which allows Armor units to be built)



- 11** Mass Production (which allows Submarines and Mass Transit to be built)
- 12** Communism and Labor Unions (which allow for Mechanized Infantry)

The Mechanized Infantry units you will develop will have an excellent defense rating (6), a strong offense rating (6), and a good movement rating (3)—which indicates the ability to travel quickly when launching attacks.

CONQUERING THE WORLD, TAKE THREE

After selecting a tribe (in this example, the Aztecs were chosen) and establishing the capital city, immediately build a second city. Then have Scientists develop the Wheel.

Once the Wheel is obtained, allocate the second city's resources to the nonstop building of Chariot units. Meanwhile, the capital city should build Settlers so that new cities can be established and more Chariot units can be built.

Set the Tax Rate to 100% Science and keep developing Chariot units. Begin to explore your continent and take over any rival cities on the continent. Once you have totally established your domination on your continent, build additional cities and have the Scientists start pursuing Sail and Trade. (Build a few Trireme units and then Sail ships, when possible.)

You'll also want to build additional cities, which you can dedicate to developing Wonders of the World. As you develop the ability to travel the seas, start building Diplomats.

Now, load the boats with military units and a Diplomat and start to explore the world one continent at a time. When you encounter a rival city, launch an attack with Chariot units. You can use Diplomats to steal technology and weaken a rival city's defenses. As you take over foreign cities, have them develop additional Chariots. Use Sail and other sea vessels to explore the water and constantly transport military units and Diplomats to new areas. (You'll want to explore the entire world.)



As long as you dedicate at least 75% of your total resources to building up a military (made up of Chariots) and start launching attacks early in the game, you will find that expanding your Civilization will be easy.

The more rival civilizations you conquer early in the game, the easier it will be to take over the entire world. Once you become the world leader, your accomplishment will make headlines (see Figure 8.1 at the beginning of the chapter). Next, the foreign leaders will acknowledge your power. Finally, your simulation will end and your score will be displayed, along with information about which Wonders of the World you have acquired. Figure 8.2 shows the final screens shown to the player who followed the strategy outlined above: Montezuma, leader of the Aztecs.

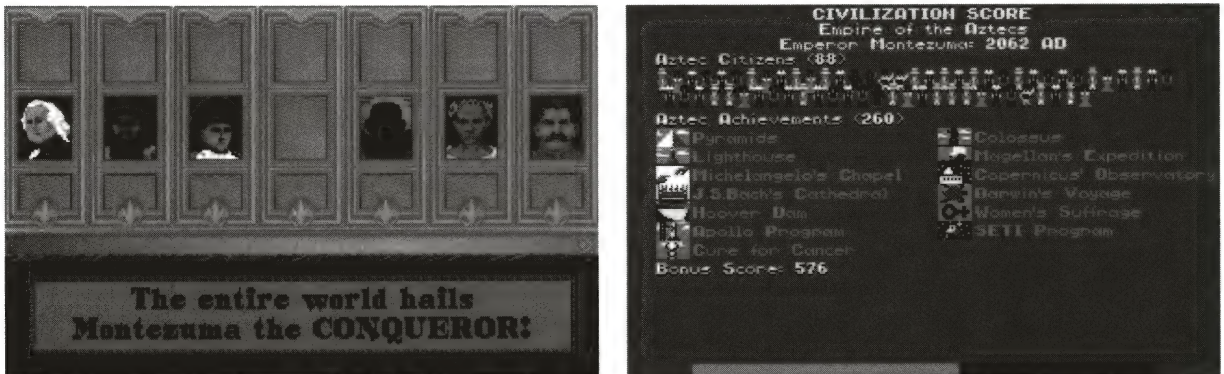


FIGURE 8.2 When you conquer the world, the leaders of the other civilizations acknowledge defeat. Next, you'll be graded on your leadership abilities (DOS version shown).

CONQUERING THE WORLD, TAKE FOUR

As you can see, there are many different strategies that you can incorporate that will ultimately allow you to conquer the world. The following strategy involves taking full advantage of Catapults and Frigate military units. If this strategy is executed correctly, you should be able to conquer the world sometime between A.D. 1300 and 1500.

To begin this strategy, set the Tax Rate to 100% Science and don't use the resources of your cities to build Wonders until after your civilization



has discovered Navigation. At this point, build the Magellan's Expedition Wonder of the World. (Chapter 9 contains reference charts that will help you determine what knowledge is needed to build each type of Wonder and military unit.) In the early stages of the simulation, build many cities close together. The more cities you can build before interacting with another civilization, the better off you'll be. As you build these initial cities, don't place them more than three tiles apart.

Since this strategy involves world domination using Catapults, it is vital that you obtain the following knowledges as quickly as possible: Alphabet, Masonry, and Mathematics. Once you can begin building Catapults, have as many cities as possible begin doing so. Since multiple cities will be building Catapult units simultaneously, you should assign one city at a time to build Barracks as well. Eventually, the majority of your cities should contain Barracks and be building Catapults on an ongoing basis.

Your next long-term goal is to start building Frigates that can be used to transport your Catapult units to other continents. In order to build Frigates, your civilization will have to acquire the following knowledges: Laws, Maps, Astronomy, Navigation, Physics, and Magnetism. Once your civilization can begin building Frigates, assign the cities located near the coastline to begin doing so. Now that your cities are building Catapults and Frigates, set the Tax Rate to 100% Taxes.

If you haven't already begun doing so, use your Catapult units to begin conquering all other civilizations on your land mass. At the same

NOTE

As this simulation progresses, don't be surprised if you're faced with unhappy citizens within your cities. (Citizens of cities that you've broken treaties with tend to be that way.) To solve this problem, create one Entertainer per city.

time, keep building new cities and have these cities build additional Catapult units. As soon as the first Frigates are built, load them up with four Catapult units each and send them off to other land masses. Each time you encounter an enemy city, first make peace; then, in the next turn, attack and take over that city. Immediately build City Walls in each newly conquered city and fill the city with Catapult units for protection.

Once the city has built up a City Wall, use its resources to build additional Catapult units. Keep repeating this process; it won't be long



before you're successfully conquering enemy civilizations on all of the world's continents.

To maintain some organization as you conquer your enemies, only attack one or two land masses at a time. Your goal should be to methodically wipe out each continent one by one. This strategy requires that you never change from despotism as the form of government. In addition, don't use city resources to build Improvements other than Barracks in each city. Once you have obtained the knowledge to build Frigates, there is no need to allocate resources toward acquiring additional knowledge. Use all of your resources and money to build Catapults and Frigates. If you choose, during an attack on an enemy civilization you can create a few Diplomats and use them to incite riots.

The main trick is to keep the enemy civilizations from becoming too advanced. Thus, it is important that you conquer at least one city in each enemy civilization before A.D. 500. This will cause the enemy civilizations to dedicate resources to building a military, not obtaining knowledge (science). Hit hard and fast.

CIVILIZATION STRATEGY TIDBITS

So far, all of the strategies presented here help you conquer the world. The other main goal in Civilization is colonizing space. The last section of this chapter will present strategies to reach the second goal. But first, here are some strategy tidbits (in no particular order), most of which can be incorporated into your own simulations to achieve either ultimate goal.

STEALING TECHNOLOGY AND WONDERS

Diplomats are an inexpensive way to steal technology and knowledge from rival cities and overthrow the rival cities without launching a military attack. If, for instance, in the Middle Ages your army is made up primarily of Knights and Cannons, it is difficult to successfully attack more advanced cities that are defended by armored infantry. To

TIP

If you can conquer rivals without violence, you can allocate your empire's resources to other tasks than building a strong military.



overcome this disadvantage, create Diplomats and have them steal every technological Advance they can from rival empires.

You can even steal Wonders of the World by conquering enemy cities that have them. With this in mind, you should concentrate on obtaining J.S. Bach's Cathedral, Women's Suffrage, and the Hoover Dam. In short, if you don't have the time or resources to build Wonders, steal them!

KEEPING YOUR POPULATION HAPPY

Especially when you are playing at the Emperor level, one of the most difficult tasks you face is maintaining the happiness of the population.

NOTE

One of the major differences between the various skill levels in Civilization is how easily the population can be kept happy rather than content or unhappy.

Developing Religion—and later Bach's Cathedral and Michelangelo's Chapel—will help you maintain happiness. Temples, Colosseums, and Cathedrals will also improve happiness in the long term. Creating Entertainers within the population is a short-term quick-fix.

Certain City Improvements and Wonders of the World (especially those having to do with advanced knowledge such as Universities and Libraries) will go a long way toward keeping your people happy. You can also lower the Tax Rate and raise the Luxury Rate. If you offer your citizens an abundance of luxuries, you can expect a "We Love the King" day to be declared in each city containing a happy population.

TRADING TO IMPROVE YOUR ECONOMY

Trade can be established when trade routes are built between two or more cities. Once the trade route is established, the benefits can be achieved by sending Caravan units in between the cities. To help boost trade, build Roads and, later, Railroads.

City Improvements that will help improve Trade within a city (once it's established) include the Marketplace and Banks. Keep in mind that Trade is maximized when your civilization is being ruled as a democracy (a built-in advantage of this type of government in Civilization).



In order to establish a trade route, a Caravan from one city must travel to another friendly city located ten or more squares away from the initial city. Each city can have up to three different trade routes established. The bigger each city is (in terms of population), the bigger the benefits of the established trade route will be.

USING CIVILIZATION'S "CHEAT MODE" (DOS VERSION ONLY)

This cheat works only with version 1 or 2 of DOS Civilization.

DOS

At the start of a simulation, most of the territory around your capital city is unexplored (it appears black), so you don't know what terrain the world has in store for you. When you're at the Main Game screen, hold down the left Shift key and type **1 2 3 4 5 6 7 8 9**. Then click on the small entire world map in the upper-left portion of the screen. This will put you into the game's "cheat mode." You can see the entire planet—even inside enemy cities. To exit this mode, repeat the procedure.

NOTE

For other methods of cheating in Civilization, check out Chapter 10.

ACCEPTING PEACE TREATIES

Early in the simulation—as you are building up your empire's military and resources—accept all treaty and peace offers from rival civilizations. Treaties can always be broken later, when you're ready to launch an attack. In the meantime, having treaties will help to maintain peace and you can concentrate on building up your civilization.

BUILDING A NAVY TO GUARD YOUR COASTLINE

Once you can build boats and other vessels, use them to guard your coastline cities from enemy attacks originating from the sea. City Walls will also help

NOTE

Your rivals can also break treaties and launch attacks. This doesn't happen often, but when it does, you can usually see the attacks coming, because you'll see a buildup of enemy military units coming close to your territory. When they get close enough, they could attack, so be prepared.



protect cities near the water but will not stop surprise attacks from rival civilizations or barbarians.

BUILDING IRRIGATION ON TERRAIN SQUARES

When it comes to founding new cities, keep in mind that you can only irrigate terrain squares that are near sources of water (oceans, lakes, or rivers) or that are connected to squares that already have irrigation.

As a city expands internally, irrigation helps the citizens produce food in higher quantity when you establish a city on a Plains square, so be sure to irrigate the square first. This will enhance the square's ability to generate food, which can maintain a growing population.

BUILDING RAILROADS

Building Railroads is an excellent Improvement to any civilization. Railroads allow military units to be transported easily. A 50% bonus (in the form of Trade, resources, and food production) is given to cities connected via a rail system. Units traveling over Railroads do not use movement points, so they can travel as far as the Railroad extends in one turn. A 50% production increase (rounded down) is given to every square covered by Railroad.

SPEAKING WITH FOREIGN DIPLOMATS

You should always take the time to speak with foreign Diplomats unless your civilization is governed as a republic or a democracy. (You can develop temporary treaties with them so you can build up your military forces without the threat of attack, then break the treaty and launch your own attack when you're ready.) Under a republic or democracy, however, your senate will automatically accept any treaties, and you may not be able to break them later without a vote.



BUILDING A SCIENCE CITY

Before a civilization can obtain military superiority, it is vital to achieve technological superiority early on in a simulation. A Science City is one way to increase the speed that knowledge is acquired by your civilization as a whole.

After creating three or four citites, create a city that will become the Science City. Within this city, build the Colossus and the Copernicus Observatory as soon as possible. You should also build these Improvements within the Science City: a Library, a Marketplace, a University, and a Bank. Once this city is established, use it to create the various Wonders of the World. Be sure to use Caravans from other cities to help lend resources to increase the production speed of whatever is being built within the Science City. To increase production in the Science City, create more Scientists within the population.

ACHIEVING BOTH CIVILIZATION GOALS AT ONCE

You can achieve both of the two ultimate goals of the game in one simulation. When you have conquered all but one civilization, allow that final rival to maintain one city (so the game won't end), but surround that city with your fortified military units and don't allow it to expand. Then, reallocate your cities' resources toward pursuing space travel. Other than occasional barbarian attacks, you won't have to worry about maintaining a strong defense, because you have captured just about the entire world. Your quest for space should now be easy.

REACHING FOR THE STARS (AND COLONIZING THEM)

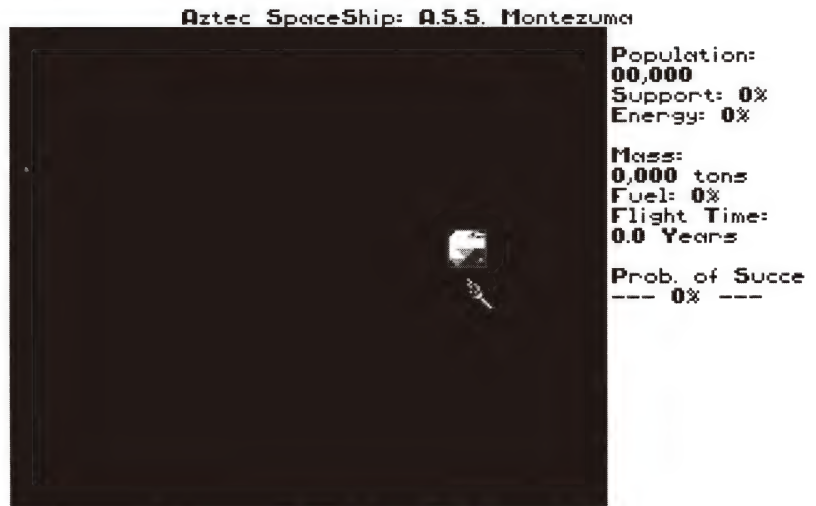
The Apollo Program Wonder of the World gives your civilization the knowledge to build spaceships. If your goal in a simulation is to explore and colonize space, you must plan to obtain the Apollo Program as early as possible, because building and successfully launching a spaceship can take several decades.



Using the Spaceship Screen

You must build a spaceship that will carry as many colonists as possible. This is done from a special game screen: the Spaceship screen (shown here in DOS). Each time one of the cities in your empire builds a spaceship unit, the Spaceship screen appears and offers information about your pending space voyage.

Following are the various displays on the Spaceship screen and what they mean:



Population Population is the number of people who are on the spaceship in search of a new life in space. Virtually every other aspect of building a spaceship is affected by this figure.

Support The people on the spaceship must be kept alive until they reach their journey's end. Support is the percentage of the population that can be supported on the journey through space, based on the available life support systems. For example, if the ship's population is 20,000 but support is 50%, the ship's life support system can only sustain 10,000 people.

Energy Life support and other maintenance systems require energy to last throughout the journey. The Energy display shows what percentage of the spaceship's energy needs are being met.

Mass Mass (the spaceship's size and weight) determines how much power, fuel, and propulsion will be required for the ship to travel.



Fuel Fuel represents the amount of fuel already aboard the spaceship. Thus, if the Fuel indicator reads 60%, you will have to add 40% more fuel to fill the tanks.

Flight Time Based on the spaceship's configuration, the computer will determine the number of years the space trek will take. This figure will change as the ship's mass and/or engine power increase or decrease.

Probability of Success This display tells you the percentage of the ship's population that is likely to live through the interstellar journey to colonize space (based upon the food, life support, and resources available). Each time an SS unit is added to the spaceship, the Support, Energy, and other related displays will change, which will in turn affect the Probability of Success display.

Building a Better Spaceship: A Few Tips

For the journey, the spaceship must carry food, energy, propulsion, and fuel. All of these elements are related and together they will determine the speed and success rate of the voyage. If the population of the ship grows, you will have to build a bigger ship with more components and modules. If

the ship's mass grows, you'll have to allocate more fuel and propulsion to ensure that the ship will have enough power to reach its destination.

Following are the three types of units that make up the spaceship:

SS Structural Units Each time an SS Structural unit is added to the spaceship, the overall size of the ship increases. Structural units represent the basic shell of the ship, to which Components and Modules can be attached. Without a sufficient

number of SS Structural units, your spaceship can't hold other vital Modules and Components.

TIP

To make your spaceship travel at faster speeds, build at least two Propulsion units for each 10,000 colonists. Also, build your spaceship quickly—you want to be the first civilization to reach Alpha Centauri. To raise additional funds to build SS units, you might consider selling some City Improvements. Once the spaceship is launched, you can always rebuild the City Improvements that were sold.



SS Component Units Before attempting to build SS Component units, your civilization must have acquired the knowledge of Plastics. There are two basic types of Components: Propulsion and Fuel. Propulsion units represent the ship's engines and Fuel units make the engines go. To make the ship travel faster, build extra Propulsion units. (Additional fuel will be required to fuel the additional engines.)

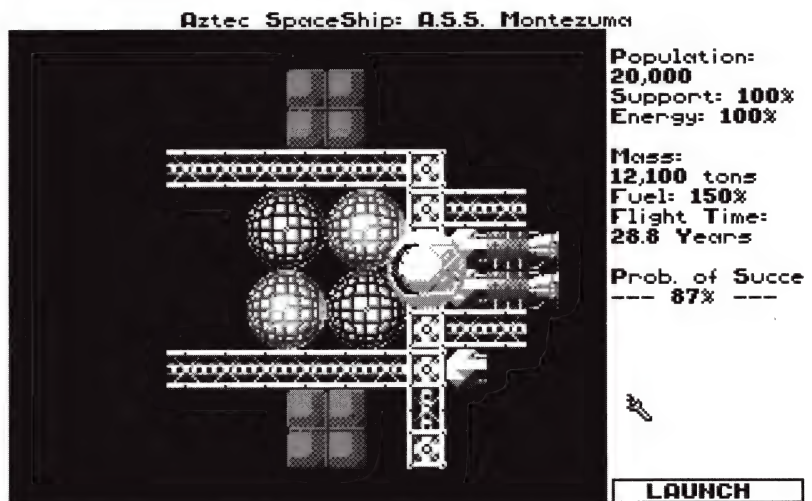
SS Module Units Now that the structure (shell) of the spaceship and its engines have been built, the ship requires Habitation, Life Support, and Solar Panel Modules to sustain its population on the long journey. Each time an SS Module is created by a city, you can select either a Habitation, Life Support, or Solar Panel Module to be added to the ship. (Building SS Modules requires the knowledge of Robotics.)

Each Habitation Module or Life Support Module will support 10,000 colonists, so plan your ship accordingly. Each Solar Panel can supply power to two other Modules. So—if you have two Habitation Modules and two Life Support Modules (for a total of four Modules), you'll also need to build two Solar Panel Modules.

PREPARING TO LAUNCH YOUR SPACESHIP

Because space travel is available to you only toward the end of the game, you'll want to make sure that the flight time is as short as possible. (As you build your spaceship, make a mental note of the number of years remaining in the simulation.)

Before launching the spaceship (by clicking on the Launch icon at the bottom of the Spaceship screen), check



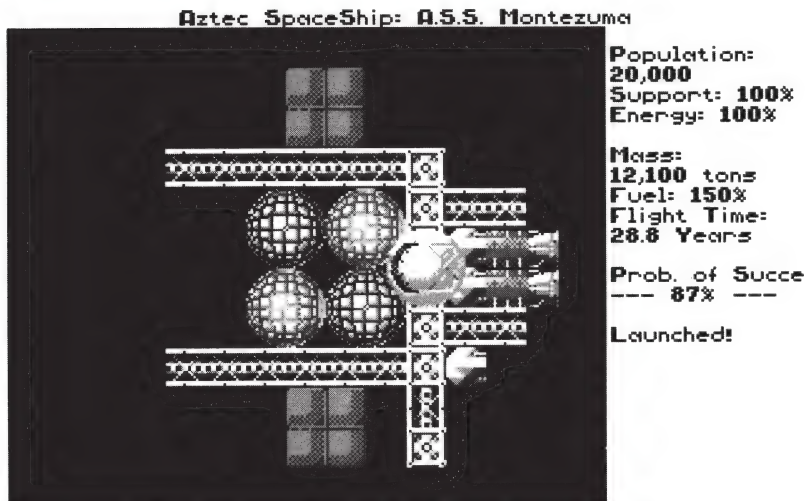


that the Probability of Success display is high and that the Flight Time display is relatively low (under thirty years). If the probability of success is low, your space travelers might not survive the journey. Likewise, if the flight time is too long, the simulation could end before the spaceship reaches its destination. The Spaceship shown here (in the DOS version) has a good chance of reaching its destination.

Remember—depending on the skill level you are using, your simulation will end in one of the following years:

Chieftain	A.D. 2100
Warlord	A.D. 2080
Prince	A.D. 2060
King	A.D. 2040
Emperor	A.D. 2020

In the later turns of the simulation, time passes in smaller increments—often one year at a time—so the seventy-year difference between the Chieftain and Emperor levels can make a huge difference.



LAUNCHING YOUR SPACESHIP

When your ship is built and you're ready to launch it, click on the Launch button in the lower-right portion of the Spaceship screen. The screen will tell you when the ship has blasted off.

Now the spaceship will travel toward its destination. In the simulation we've been following, the journey will take approximately 28.8 years, during which time each city in



the Aztec empire can build additional City Improvements, military units, or Wonders of the World on the home planet to continue the empire's expansion and internal growth.

After the spaceship lands (or is destroyed), an additional spaceship can be built from scratch, which means the cities will have to build additional SS modules.

REACHING YOUR SPACE TRAVEL GOAL

Now that you've reached space, your goal is to reach Alpha Centauri and begin to establish colonies. Good luck, Godspeed, and...

may the force be with you.

Live long and prosper.

TIP

When you begin space exploration, have your home-based Scientists pursue the Future Technology Advances. These are worth five points each and will be added to your total game score.

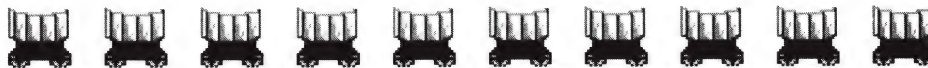
NOTE

A spaceship will be destroyed if it runs out of fuel or if its energy is depleted before the spaceship reaches its destination.

REFERENCE

CHARTS

N I N E



N I N E

The charts in this chapter are meant to help you to create a strong military and build those Wonders of the World that will be most useful. You'll probably want to refer to these charts often during a simulation.

OBTAINING THE WONDERS OF THE WORLD

There are two primary ways to obtain the twenty-one Wonders of the World, which (as you know by now) are important elements of this game. The first method is to earn each Wonder by having your Scientists develop the necessary knowledges and Advances, then invest the resources to build each Wonder. The second method is for your civilization to steal them from other civilizations by successfully invading and conquering any rival city that has obtained a Wonder.

WHEN WONDERS CAN BE OBTAINED

Wonders of the World are divided into three categories, or ages, based upon the point in the game they can usually be obtained. Each age contains seven Wonders.

Wonders of Antiquity

- Colossus
- Great Library
- Great Wall
- Hanging Gardens
- Lighthouse

NOTE

There are no actual ages in the game—Wonders can be built as soon as the appropriate Advances are discovered—but you generally learn the right knowledges and become able to build (or steal) them in the age divisions given here.



- Oracle
- Pyramids

Wonders of the Middle Ages

- Copernicus' Observatory
- Darwin's Voyage
- Isaac Newton's College
- J.S. Bach's Cathedral
- Magellan's Expedition
- Michelangelo's Chapel
- Shakespeare's Theatre

Modern Wonders

- Apollo Program
- Cure for Cancer
- Hoover Dam
- Manhattan Project
- SETI Program
- Women's Suffrage
- United Nations

ADVANCEMENT CHARTS FOR WONDERS OF THE WORLD

The first seven Wonders are relatively easy to obtain in the early stages of the game. Building them encourages you to assign your civilization's Scientists to develop core knowledge that you will need later to create more advanced Wonders. As you will see by examining these charts, many of the core Advances—such as the Alphabet, Ceremonial Burial, Bronze Working, the Wheel, Map Making, and Masonry—are pre-requisites for many of the later Wonders. Once your civilization has



acquired an Advance such as the Alphabet, you have it—you need not obtain that knowledge again.

These charts outline the key knowledges required to obtain each Wonder, but the order in which you achieve each of these knowledges may be slightly different. The important thing is that your empire obtain each Advance listed so that the civilization can acquire the Wonder that follows.

NOTE

As you acquire each of the knowledges required to build the Wonders of the World, you can also use the same knowledges to build various City Improvements. City Improvements help an individual city grow internally. Wonders of the World are built in individual cities, but they benefit the entire empire.

WONDERS OF ANTIQUITY

To obtain these early Wonders, you must first assign your Scientists to obtain the following core knowledges: Pottery, Bronze Working, Alphabet, Code of Laws, Literacy, Masonry, Map Making, Ceremonial Burial, and Mysticism.

Wonder of the World

Colossus

**VITAL STATS**

Bonus: Trade +1
Resources: 200

Obsolete: After Electricity

Bronze
Working

Colossus



Wonder of the World

Great Library

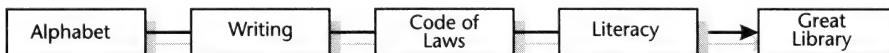


VITAL STATS

Bonus: Any technology two other civilizations possess

Resources: 300

Obsolete: After University



Wonder of the World

Great Wall



VITAL STATS

Bonus: Other civilizations offer peace

Resources: 300

Obsolete: After Gunpowder





Wonder of the World

Hanging Gardens



VITAL STATS

Bonus: +1 Happy citizens
Resources: 300

Obsolete: After Invention

Pottery

Hanging
Gardens

Wonder of the World

Lighthouse



VITAL STATS

Bonus: Sea movement +1
Resources: 200

Obsolete: After Magnetism

Alphabet

Map
Making

Lighthouse



Wonder of the World

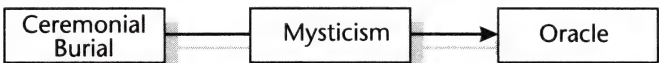
Oracle



VITAL STATS

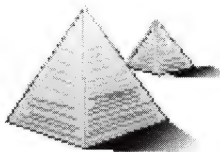
Bonus: Doubles Temple effects
Resources: 300

Obsolete: After Religion



Wonder of the World

Pyramids



VITAL STATS

Bonus: Choose any government
Resources: 300

Obsolete: After Communism





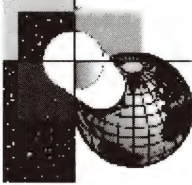
WONDERS OF THE MIDDLE AGES

Those Wonders of the World usually built in the Middle Ages are slightly more difficult to obtain—they require more advanced knowledge and take more turns and resources to build—than the Wonders of Antiquity. For example, Darwin's Voyage requires your empire's Scientists to discover the Alphabet, Railroads, and Bridge Building.

As you reach the middle of the Middle Ages, you should ensure that your civilization has acquired those basic knowledges that will be needed later to quickly obtain the more advanced Wonders that become available when your civilization reaches Modern Times.

Wonder of the World

Copernicus' Observatory

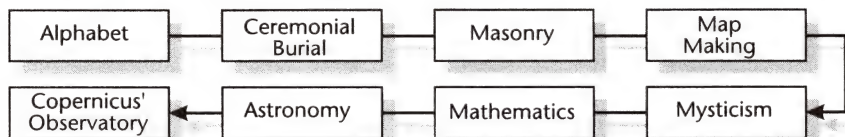


VITAL STATS

Bonus: Doubles knowledge production in the city

Resources: 300

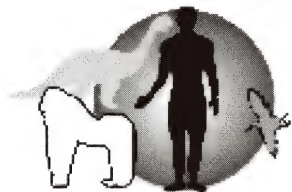
Obsolete: After Automobile





Wonder of the World

Darwin's Voyage

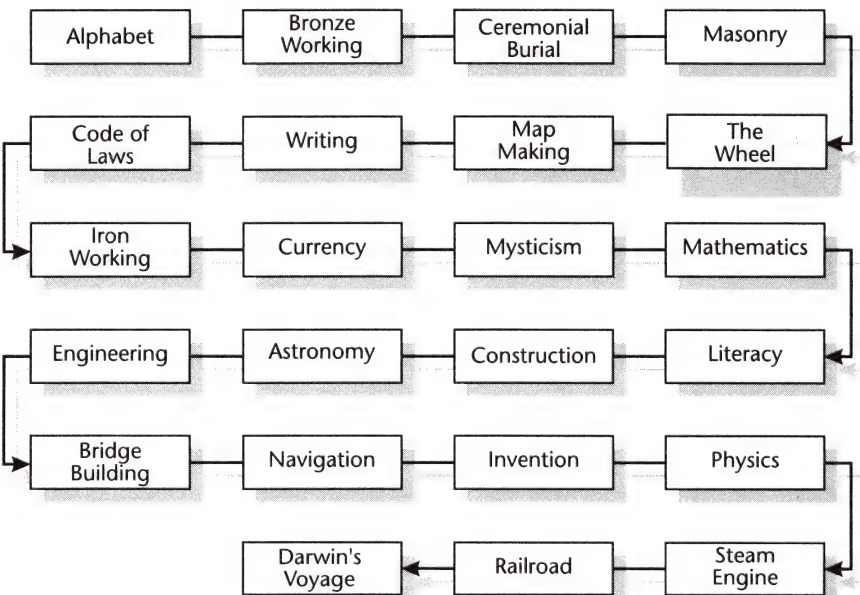


VITAL STATS

Bonus: 2 Civilization Advances

Resources: 300

Obsolete: Never





Wonder of the World

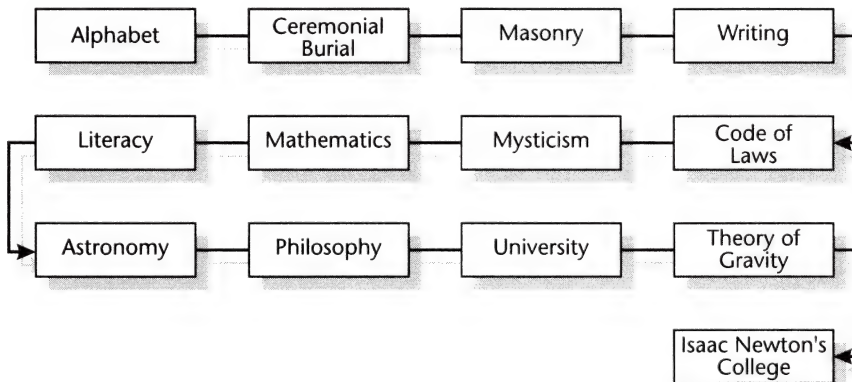
Isaac Newton's College



VITAL STATS

Bonus: Increases production from
Libraries and Universities
Resources: 400

Obsolete: After Nuclear Fission





Wonder of the World

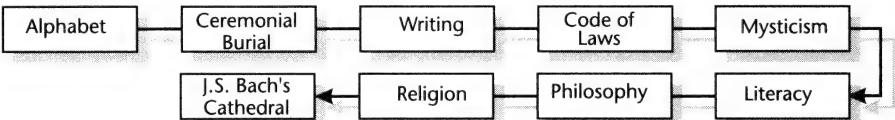
J.S. Bach's Cathedral



VITAL STATS

Bonus: -2 Unhappy citizens
Resources: 400

Obsolete: Never



Wonder of the World

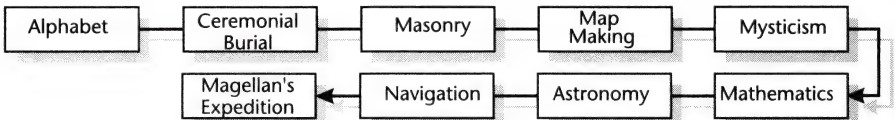
Magellan's Expedition



VITAL STATS

Bonus: +1 Sea Movement
Resources: 400

Obsolete: Never





Wonder of the World

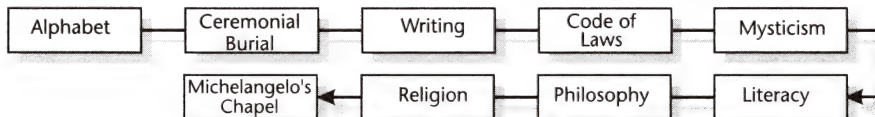
Michelangelo's Chapel



VITAL STATS

Bonus: Bonus to Cathedrals
Resources: 300

Obsolete: After Communism



FUTURE TECHNOLOGIES

Once you have obtained all of the Civilization Advances (from Alphabet to Fusion Power), your Scientists can begin to explore Future Technologies. They have no effect on the units, City Improvements, or Wonders that you can build, but they are worth an extra five points each toward your final game score. They are available only in the later stages of a simulation and represent technologies and improvements that have not yet been created in the real world.



Wonder of the World

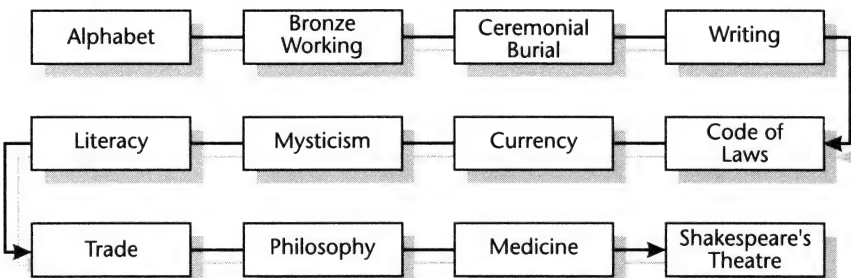
Shakespeare's Theatre



VITAL STATS

Bonus: All unhappy citizens in the city are content
Resources: 400

Obsolete: After Electronics





Wonder of the World

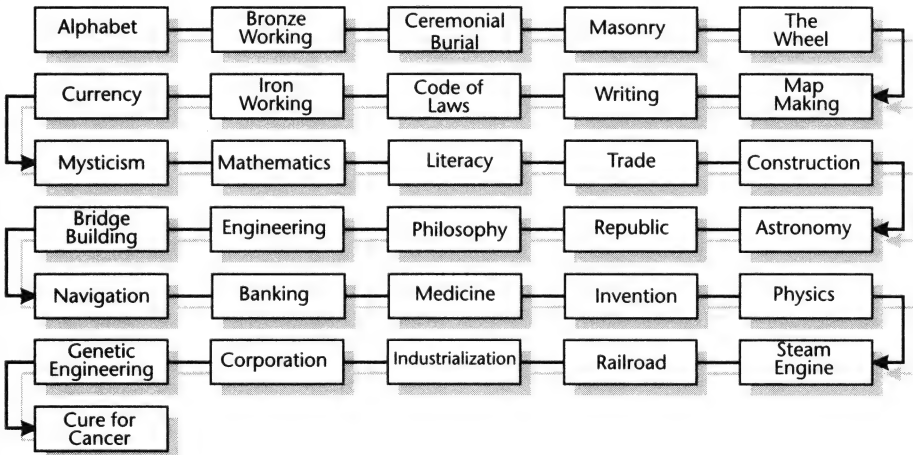
Cure for Cancer



VITAL STATS

Bonus: +1 Happy citizens
Resources: 600

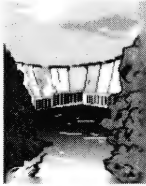
Obsolete: Never





Wonder of the World

Hoover Dam

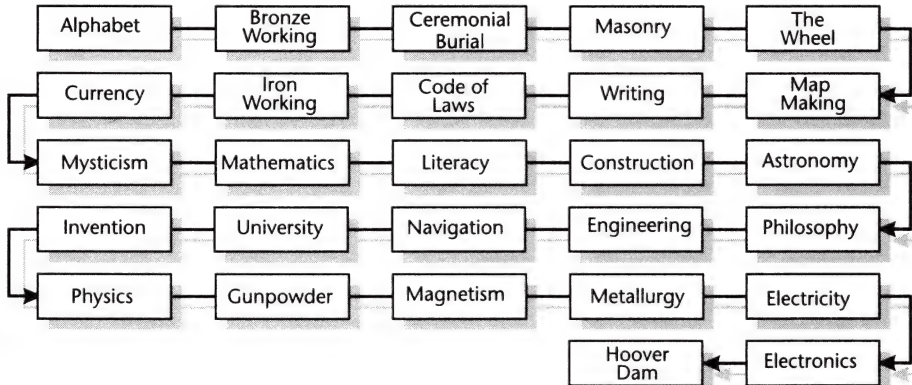


VITAL STATS

Bonus: +50% Resources to each city on the continent

Resources: 600

Obsolete: Never





Wonder of the World

Manhattan Project

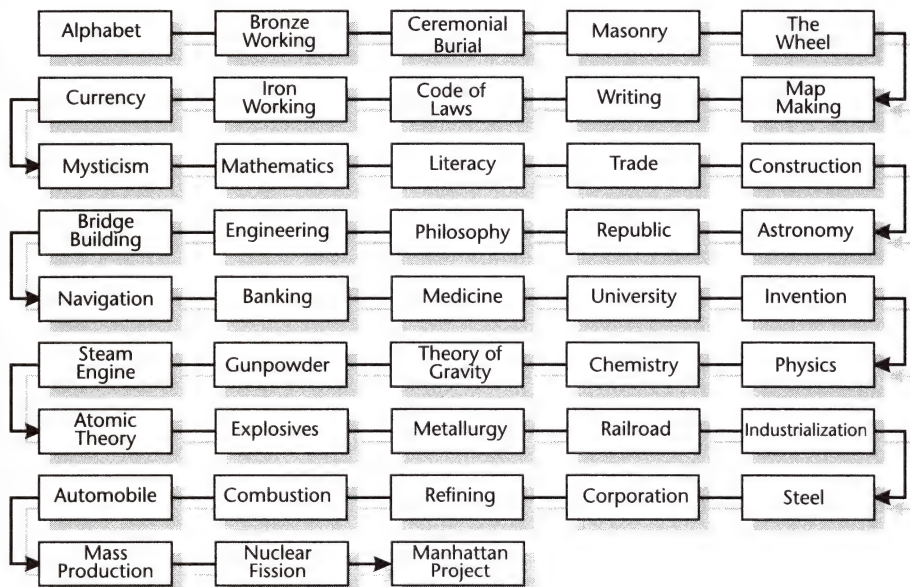


VITAL STATS

Bonus: Nuclear Weapons

Resources: 600

Obsolete: Never





Wonder of the World

SETI Program

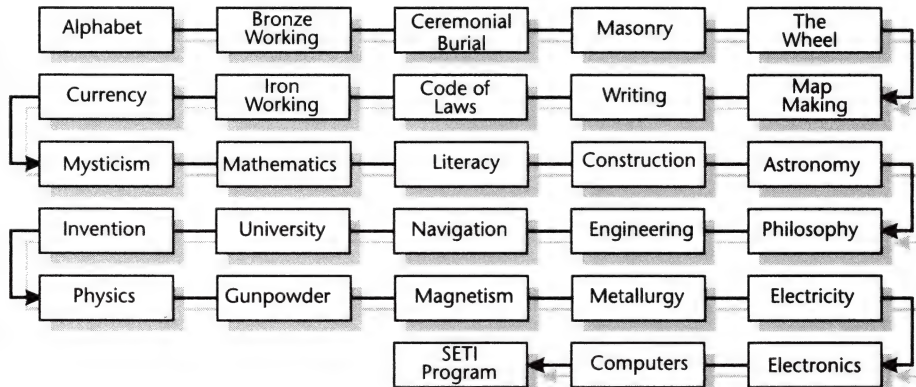


VITAL STATS

Bonus: Knowledge +50%

Resources: 600

Obsolete: Never





Wonder of the World

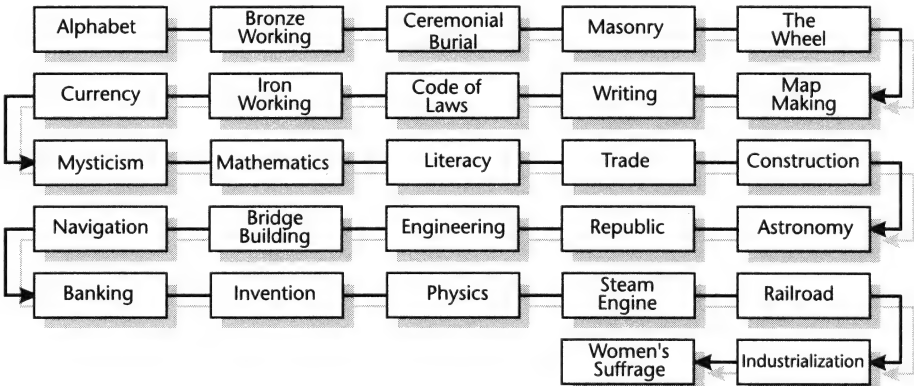
Women's Suffrage



VITAL STATS

Bonus:-1 Unhappy for units away from home
Resources: 600

Obsolete: Never





Wonder of the World

United Nations

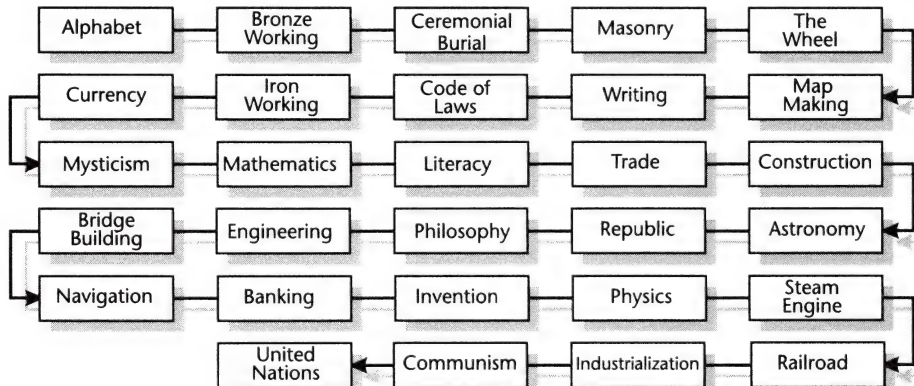


VITAL STATS

Bonus: Other civilizations
offer peace

Resources: 600

Obsolete: Never





UNIQUE WONDERS, MULTIPLE IMPROVEMENTS

As we've said, only one of each Wonder of the World can be built, but the same City Improvements can be built in cities throughout the empire. There are, however, a few exceptions to this rule:

- The Palace can only be built in one city. (The city that contains the Palace is the capital city. To raise funds, you can sell your Palace and then rebuild a new Palace in another city.)
- The Hydro Plant can only be built in cities adjacent to water or mountain squares.

Each city can also create as many of each military unit (and as many Diplomats and Caravan units) as it can maintain.

CIVILIZATION'S MILITARY UNITS

Because many strategies within each simulation involve the use of a strong military for either offensive or defensive purposes, it is vital for any civilization to be supported by a strong military, which you must begin to develop immediately at the start of the game.

Each of the military unit charts depicts the knowledges needed to build different types of military units.

NOTE

To find out which military units and City Improvements can be built by your civilization at any time, click on the Change button in any of your City screens; the Change menu, listing all of the available military units and City Improvements, will be displayed.

BUILDING A MILITARY BASED UPON ACQUIRED KNOWLEDGE

When you are choosing which type(s) of military unit(s) to build, you must first determine which Advancements your civilization has acquired. This will suggest which units you are capable of building. Then you should check the Vital Stats chart that accompanies each military unit chart to



determine the unit's Attack Strength, Defense Strength, Movement Capabilities, and its Cost in Resources to build.

The higher a unit's Attack, Defense, and Movement values are, the more powerful that unit is. However, units with high values also cost more resources and will take longer to build.

DIPLOMATS AND CARAVANS ARE NONMILITARY UNITS

Diplomats and Caravans are not listed within this section; however, Diplomats can be used to assist the military in overthrowing a foreign city, and Caravans can offer support to those cities building Wonders of the World.

To create a Diplomat unit, both the Alphabet and Writing are required. To create Caravan units, your civilization will need the Alphabet, Bronze Working, Code of Laws, Currency, and Trade.

ADVANCEMENT CHARTS FOR MILITARY UNITS

These charts (presented in alphabetical order, more or less) outline the knowledges your empire will have to acquire before each type of military unit can be built. Use these charts during a simulation as a resource for creating winning development strategies for your Scientists.



Military Unit

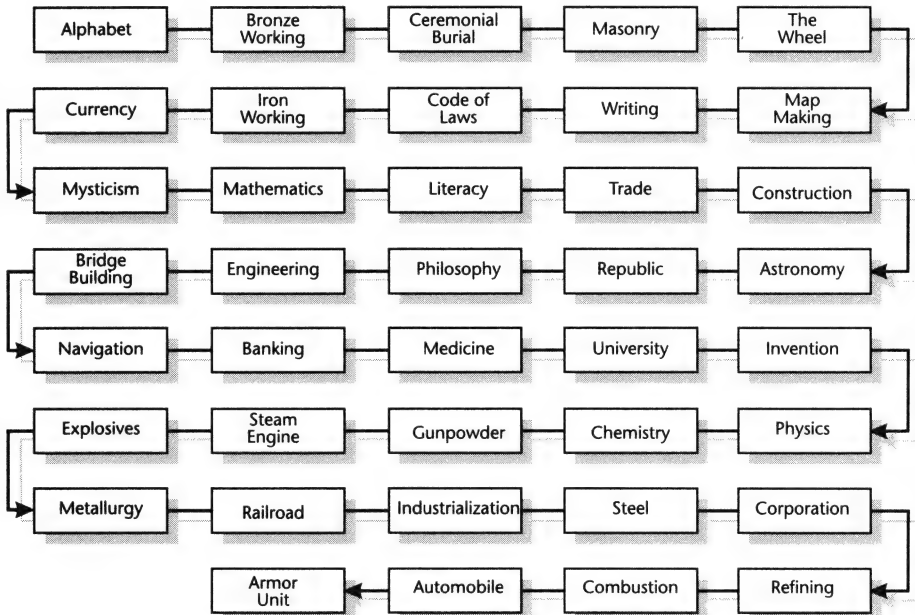
Armor



VITAL STATS

Attack: 10 Movement: 3
Defense: 5 Resources: 80

Obsolete: Never





Military Unit

Artillery



VITAL STATS

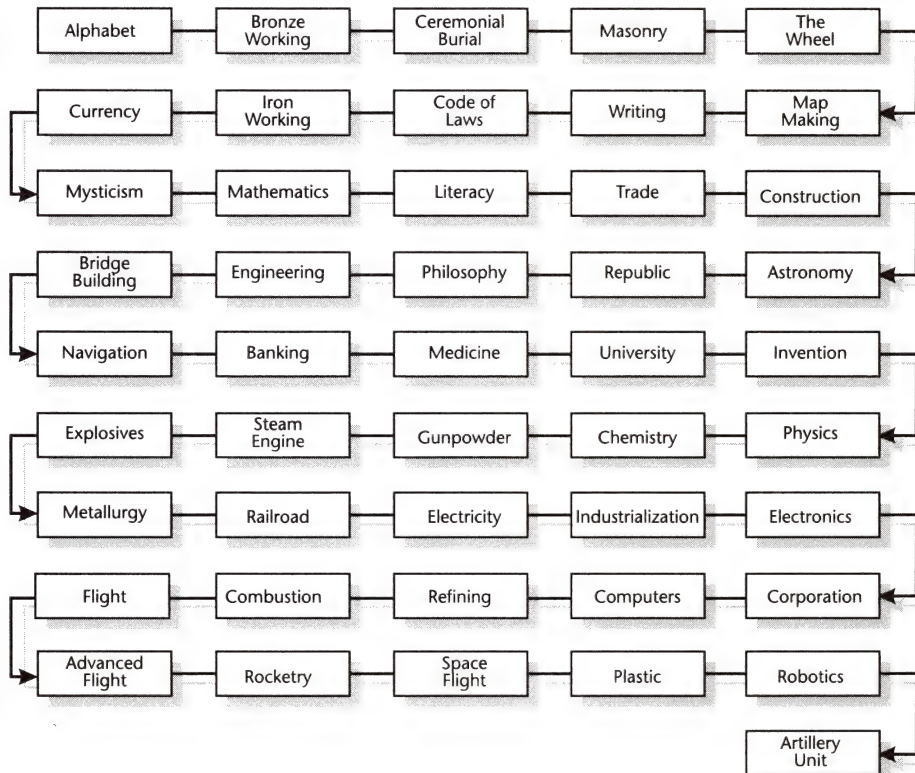
Attack: 12

Movement: 2

Defense: 2

Resources: 60

Obsolete: Never





Military Unit

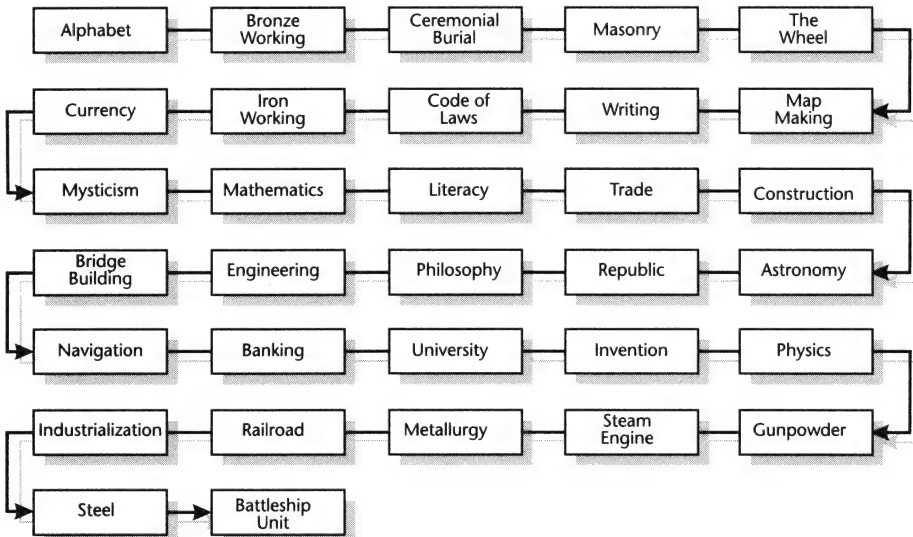
Battleship



VITAL STATS

Attack: 18 Movement: 4
Defense: 12 Resources: 160

Obsolete: Never





Military Unit

Bomber

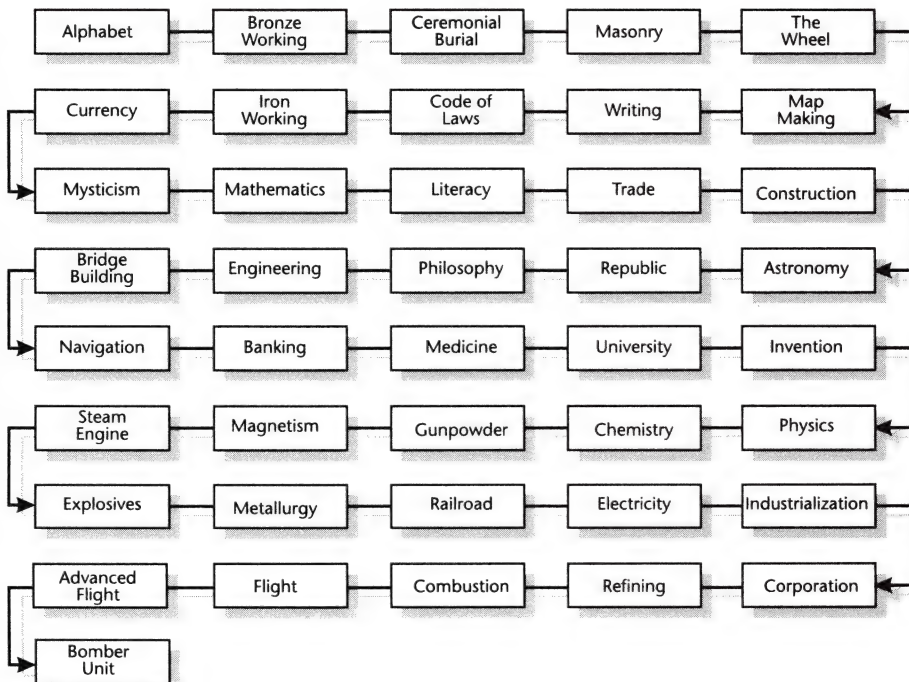


VITAL STATS

Attack: 12
Defense: 1

Movement: 8
Resources: 120

Obsolete: Never





Military Unit

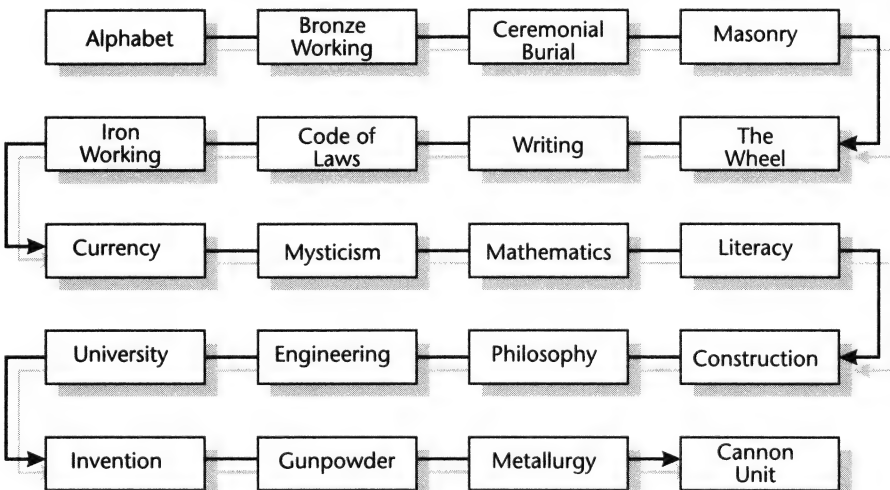
Cannon



VITAL STATS

Attack: 8 Movement: 1
Defense: 1 Resources: 40

Obsolete: After Artillery





Military Unit

Carrier



VITAL STATS

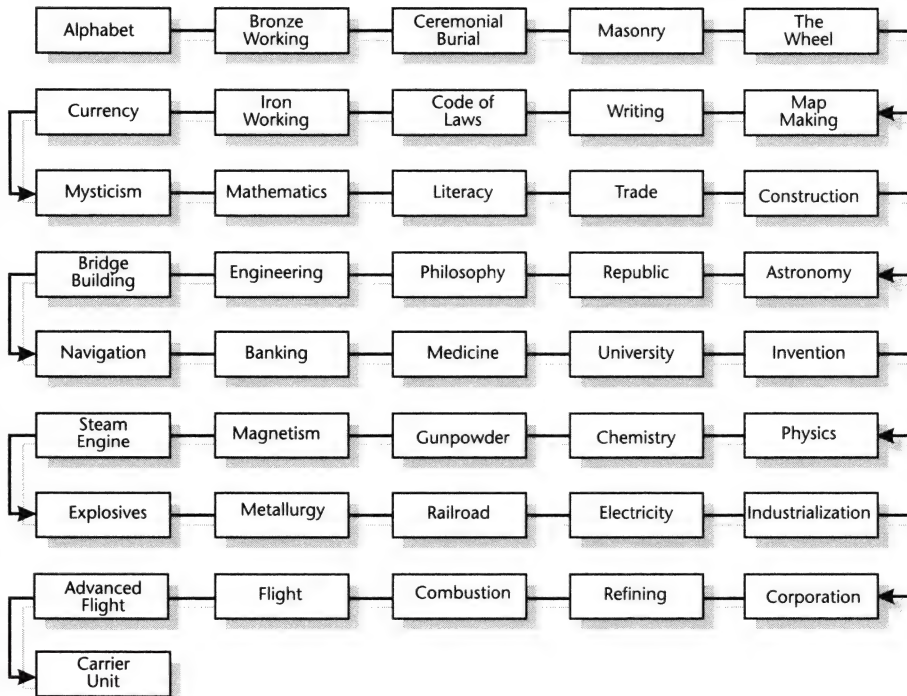
Attack: 1

Movement: 5

Defense: 12

Resources: 160

Obsolete: Never





Military Unit

Catapult



VITAL STATS

Attack: 6 Movement: 1
Defense: 1 Resources: 40

Obsolete: After Cannon



Military Unit

Cavalry



VITAL STATS

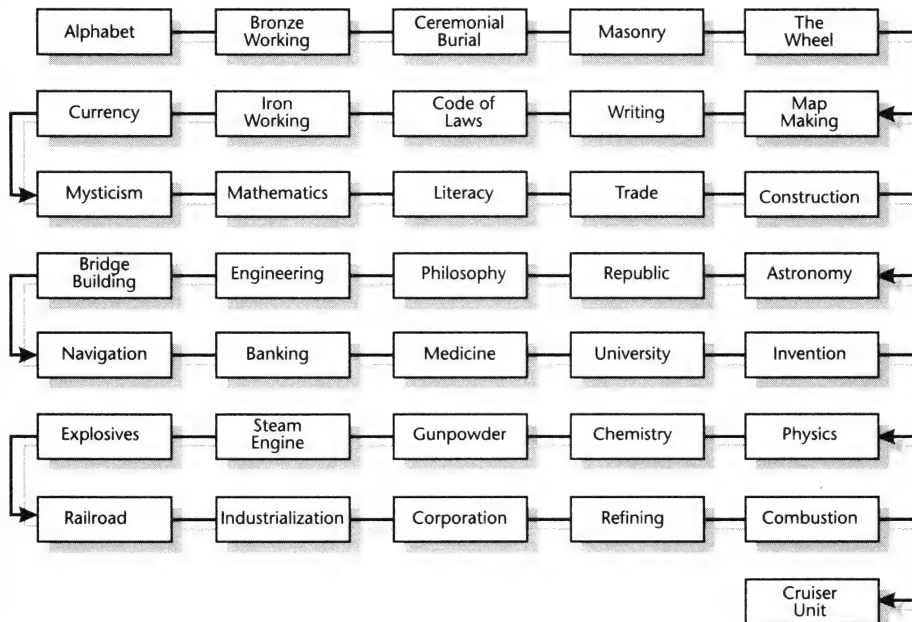
Attack: 2 Movement: 2
Defense: 1 Resources: 20

Obsolete: After Riflemen





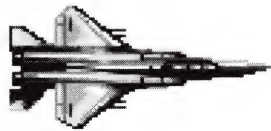
Attack: 6	Movement: 6
Defense: 6	Resources: 80
Obsolete: Never	





Military Unit

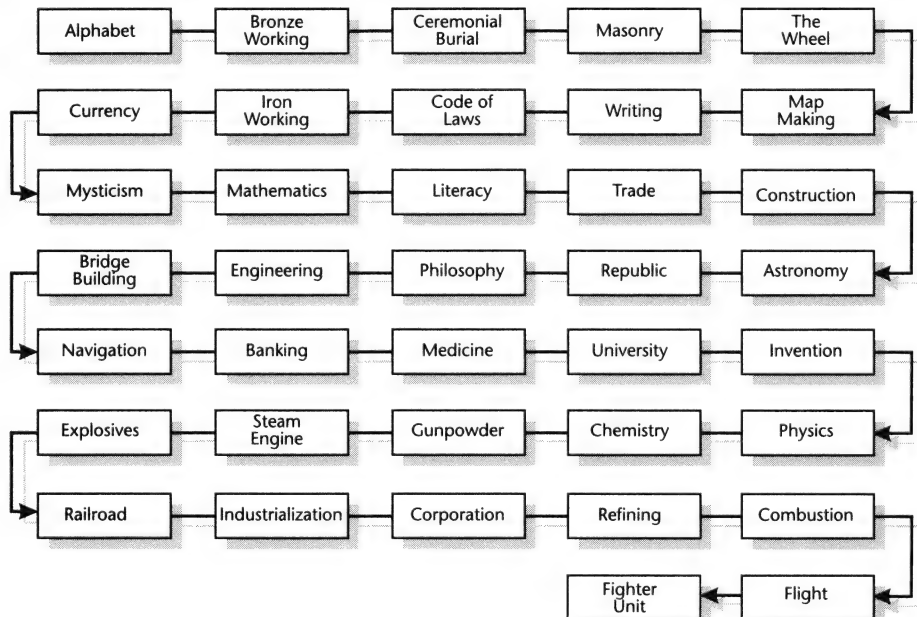
Fighter



VITAL STATS

Attack: 4 Movement: 10
Defense: 2 Resources: 60

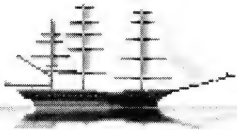
Obsolete: Never





Military Unit

Frigate

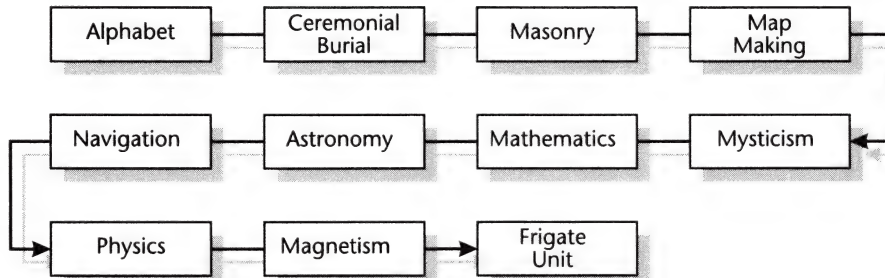


VITAL STATS

Attack: 2
Defense: 2

Movement: 3
Resources: 40

Obsolete: After Transport





Military Unit

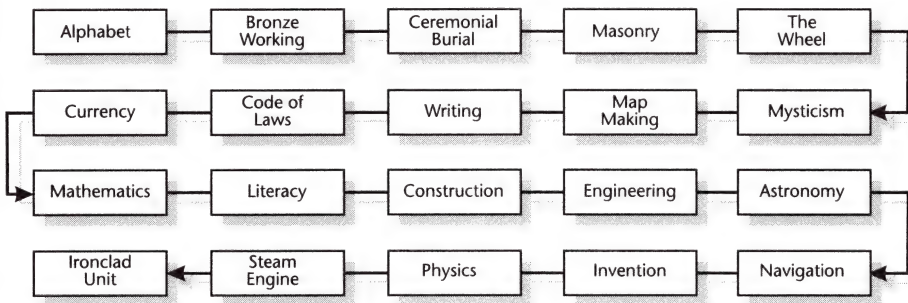
Ironclad



VITAL STATS

Attack: 4 Movement: 4
Defense: 4 Resources: 60

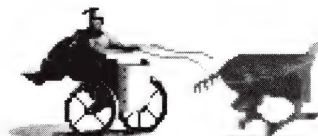
Obsolete: After Cruiser





Military Unit

Chariot



VITAL STATS

Attack: 4 Movement: 2
Defense: 1 Resources: 40

Obsolete: After Knight

The
Wheel

Chariot
Unit

Military Unit

Knights



VITAL STATS

Attack: 4 Movement: 2
Defense: 2 Resources: 40

Obsolete: After Armor

Alphabet

Ceremonial
Burial

Masonry

Horseback
Riding

Code of
Laws

Knights
Unit

Chivalry

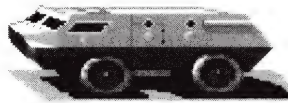
Feudalism

Monarchy



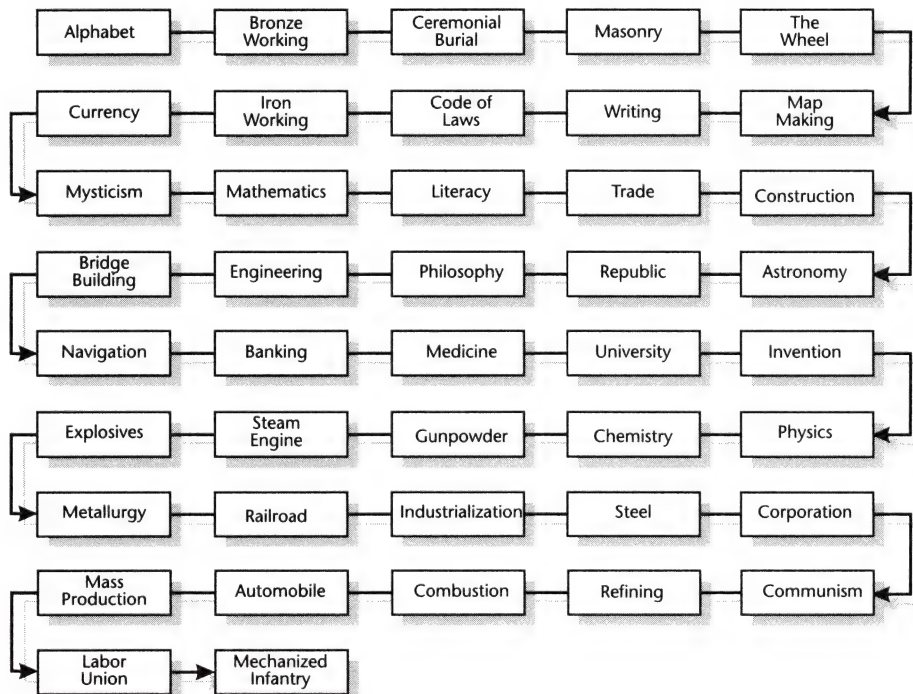
Military Unit

Mechanized Infantry



VITAL STATS

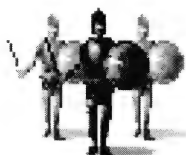
Attack: 6 Movement: 3
 Defense: 6 Resources: 50
 Obsolete: Never





Military Unit

Legion



VITAL STATS

Attack: 3 Movement: 1
Defense: 1 Resources: 20

Obsolete: After Riflemen



Military Unit

Militia



VITAL STATS

Attack: 1 Movement: 1
Defense: 1 Resources: 10

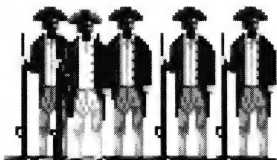
Obsolete: After Musket





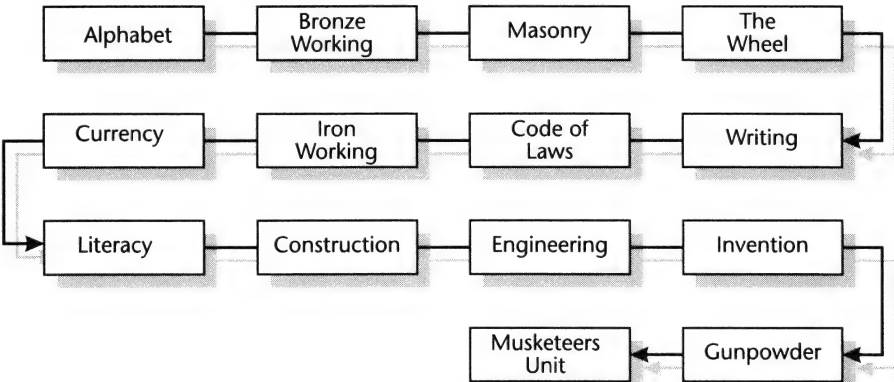
Military Unit

Musketeers



VITAL STATS

Attack: 2 Movement: 1
Defense: 3 Resources: 30
Obsolete: After Riflemen





Military Unit

Nuclear



VITAL STATS

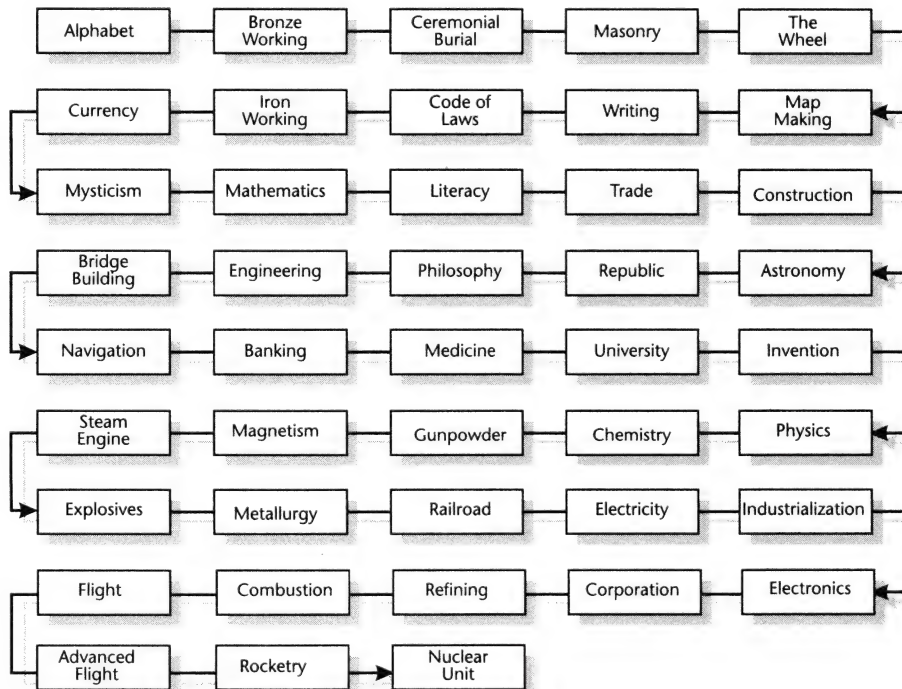
Attack: 99

Movement: 16

Defense: 0

Resources: 160

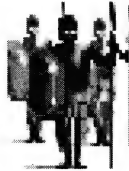
Obsolete: Never





Military Unit

Phalanx



VITAL STATS

Attack: 1 Movement: 1
Defense: 2 Resources: 20

Obsolete: After Musket

Bronze
Working

Phalanx
Unit





Military Unit

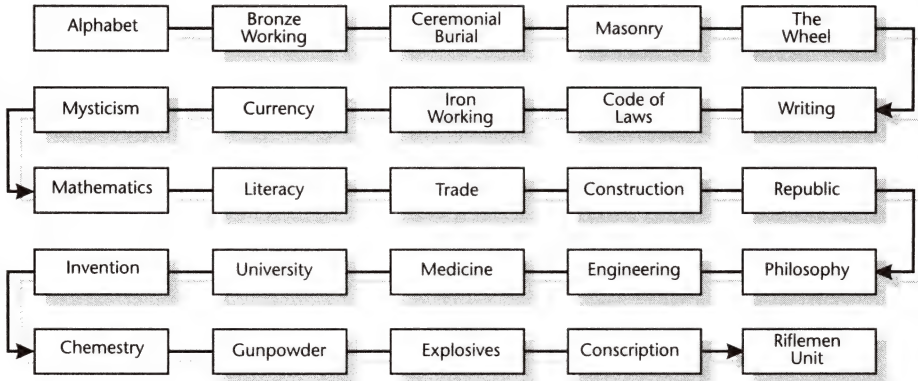
Riflemen



VITAL STATS

Attack: 3 Movement: 1
Defense: 5 Resources: 30

Obsolete: Never





Military Unit

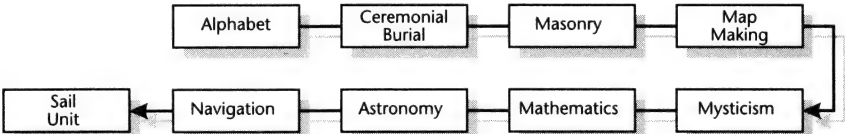
Sail



VITAL STATS

Attack: 1 Movement: 3
Defense: 1 Resources: 40

Obsolete: After Frigate





Military Unit

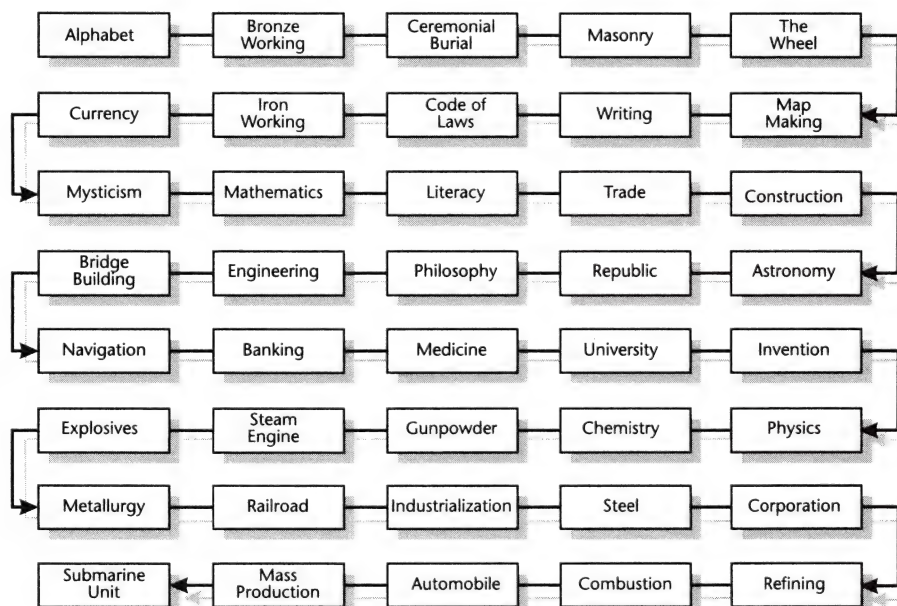
Submarine



VITAL STATS

Attack: 8 Movement: 3
Defense: 2 Resources: 50

Obsolete: Never



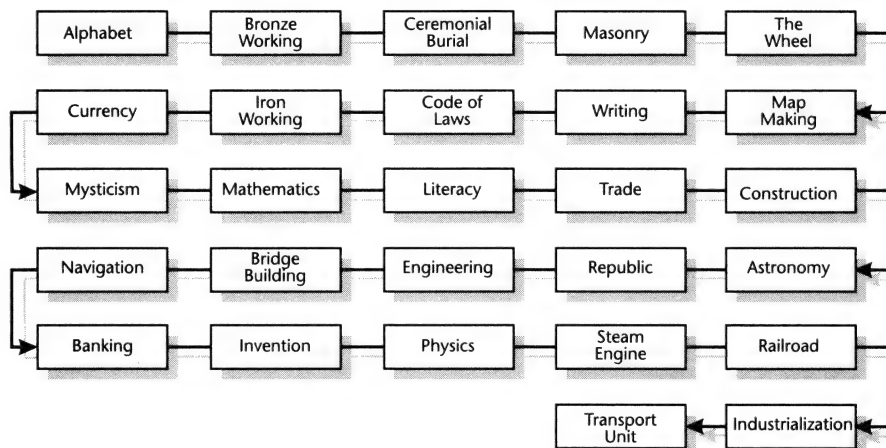


Transport



Attack: 0	Movement: 4
Defense: 3	Resources: 50

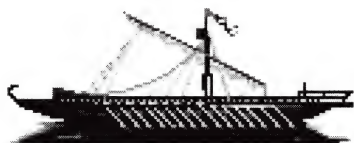
Obsolete: Never





Military Unit

Trireme



VITAL STATS

Attack: 1 Movement: 3
Defense: 0 Resources: 40

Obsolete: After Sail



NOTE

For more Civilization secrets, turn to Chapter 10, which offers information on how to cheat.

THE NEXT STEP IS PLAYING

Thus far, this book has offered an overview, tutorials, and strategies to get you started playing your own Civilization simulations. The next step is for you to experience firsthand what this game has to offer by playing for yourself.

**LEARNING TO
CHEAT—DOS
VERSION ONLY**

T E N



T E N

Anyone who follows politics knows that not all politicians are always on the up-and-up. What does that say for leaders of great empires?

DOS

GETTING AHEAD AS A LEADER

As you probably already know, Civilization is a challenging game that requires you to juggle many responsibilities as you strive to expand your empire. Maybe you've wished that Civilization was a bit less challenging. There are a number of methods of cheating in Civilization; we'll talk about seven of them here. Unfortunately, this chapter only applies to the DOS version of the game. According to the programmers of the Windows edition of Civilization, all of the built-in cheats have been removed...sorry folks. But dedicated Civilization players never leave things alone for long. To discover if any Windows version cheat programs have been created, be sure to check out the various on-line services.

NOTE

Two of these methods require the use of a modem to download short utility programs written by dedicated Civilization players and made available (free of charge) through various on-line services. The other methods of cheating can be done using keyboard commands, but only in certain (specified) versions of the game.

CHEATING IN CIVILIZATION VERSIONS 1 AND 2

In the early versions of Civilization (versions 1 and 2 only), Micro-Prose Software included a built-in cheat mode within the program. If you are using either of those early versions of Civilization, try holding down the left Shift key and then pressing **1 2 3 4 5 6 7 8 9**.

You will enter a special "debug" mode, which was taken out of the game in later versions. While you're in this debug mode, click on the small map portion of the Main Game screen and you'll instantly see a view of



the entire world—even areas you have not yet explored, including the locations of all rival cities!

You'll also be able to enter the City screens of rival cities and sell off their Improvements.

While still in debug mode, try pressing the various function keys (F1 through F10 on your keyboard) and check out what they do. For example, press F7 to see how well rival civilizations are developing, F8 to see a line graph charting your progress, and F9 to get information on the terrain squares that comprise your continent.

To exit debug mode, just hold down the Shift key and press **1 2 3 4 5 6 7 8 9** again. You will return to the regular Main Game screen.

PLACING A “HEX” ON CIVILIZATION: FOR PROGRAMMERS ONLY

When you save a game in Civilization, a CIVIL#.SVE file is created. (The symbol # represents a number between 0 and 9, which will be inserted automatically in place of the symbol.)

NOTE

Before proceeding, be sure you are very familiar with the use of hex editors. *This method is for programmers only.*

One player has discovered that if you use a hex editor (such as the Disk Editor in Norton Utilities or another hex editor in some similar software package) you can modify a saved game and change the amount of money in your treasury.

This trick involves converting the amount of money you have into a hexadecimal numerical value and then altering the bytes (e.g., 1234 becomes 3412 and ABCD becomes CDAB).

NOTE

Be sure to make a backup of the CIVIL#.SVE file before tampering with it. Then, if you make a mistake, the original data file can be used and the game can continue.

The hex numerical value can be found within the CIVIL#.SVE file somewhere around offset 135h–150h. Change this number, and you will create a whole new game play experience (by adding funds to your treasury) from your saved game data.



CIVILIZATION TIME TRAVEL

This cheating method requires a short (only 9359 bytes long) utility program called CIVDTE.EXE, which allows you to change the date of any saved game file.

Installing CIVDTE.EXE

You can download CIVDTE.ZIP (as CIVDTE.EXE is known in its compressed state) from one of the on-line services (such as CompuServe, America Online, or the MicroProse BBS) and then use a decompression program to decompress the file.

Place the CIVDTE.EXE file in the directory that contains the Civilization program. (If the software is on your hard disk, it will be in the C:\MPS\CIV subdirectory.)

Using CIVDTE.EXE

Suppose you're taking part in a simulation and you're about to conquer the world and/or reach Alpha Centauri—but the year is A.D. 2070 (which means that the program will terminate in just thirty years if you're playing at the Chieftain level).

Using the CIVDTE.EXE utility, you can give yourself a little (or a lot) more time. First, save the game data by accessing Civilization's Game pull-down menu and selecting the Save Game option.

Once the game data is saved,

- 1 Enter the directory where the Civilization game is located (on a hard disk, the default directory is C:\MPS\CIV).

NOTE

See Chapter 2, "Installing Civilization—DOS Version," for more information on decompression programs and techniques.

NOTE

To get a brief explanation of how this program works, type *CIVDTE* and press ↵.

NOTE

When you save the game, you must know where the game data is being saved (there are ten possibilities: CIVI0.SVE through CIVI9.SVE).



- 2** At the DOS prompt, type **CIVDTE**, followed by the filename (CIVIL#.SVE, with the # symbol replaced by the correct number) and the year in which you wish to restart the simulation.

Within seconds, the file will be modified and you can reload Civilization, then load in the game data stored in CIVIL1.SVE. To return to Civilization,

- 3** Select Load a Saved Game and restart your simulation, just as you would normally.

NOTE

When you type in the year to which you wish to change, use positive numbers for A.D. dates or negative numbers for B.C. dates. If the game you want to modify was saved as CIVIL1.SVE and you wish to change the year to A.D. 500, you should type *CIVDTE CIVIL1.SVE 500* and press ↵.

NOTE

Keep in mind that everything about the game will be exactly the same—only the date will have changed.

Now, instead of the year being A.D. 2070, it can be A.D. 100, or any other date you choose, which will allow you to finish (and presumably win) your simulation.

GIVING YOUR CIVILIZATION MEGABUCKS

Game player Richard Lawrence has written a utility program called CC.EXE (Civilization Cheat), which simply adds money (\$30,000, to be exact) to your empire's treasury.

CC.EXE can be downloaded from the various on-line services, as mentioned before. (You may also have to use a public domain or shareware decompression utility to convert the CC.ZIP file you download into the CC.EXE file.)



Using CC.EXE

To adjust your empire's treasury, save the game data of the current simulation as usual and quit the game. For this example let's say that Civilization named the game datafile CIVIL1.SVE.

To make the treasury \$30,000 within the simulation saved as CIVIL1.SVE,

1 At the C:\MPS\CIV\ prompt, type **CC CIVILA.BAK CIVIL1.SVE**.

2 Press ↵.

In the command line you typed, CC executes the program, CIVILA.BAK is the name you gave a new backup file (in which the old, unaltered game data was stored), and CIVIL1.SVE is the name of the saved game data file you wanted (in this example) to alter. You could have named the backup file anything (eight characters or less), as long as you used the .BAK extension.

3 Now, reload CIVIL1.SVE by using the Load Saved Game option in Civilization.

You'll notice that a very large deposit has been made to your treasury. Now you can purchase any Wonders of the World that are available, or any other units you wish.

Happy spending!

NOTE

For quick help with this program, type CC ? at the DOS prompt.

STRATEGIES TO MAKE PLAYING EASIER

This section discusses a few bugs in Civilization that can be used to make certain aspects of playing the game a little easier.



FLYING BOMBER UNITS

Once you have created Bomber units, fly them over water during their first turn in operation and then place them on Sentry duty—the Bomber units will sit there (in mid-air) until they are removed from Sentry duty and reactivated.

When you're ready to reactivate the Bomber units on Sentry duty, you can send a Carrier unit to pick up the Bombers. That will remove them from Sentry duty and make them into active units, which you can use to launch an attack. Herein lies the cheat: when a unit is on Sentry duty, its purpose is to defend itself against attack, not to initiate an attack. By activating your Bombers from Sentry duty without being provoked by an enemy attack, you can use them to launch an attack out of the blue.

IMPROVING YOUR MILITARY

If you want to improve your military forces without having to earn all of the prerequisite knowledges, you can use Diplomats to steal Conscription and Explosives from rival empires, then use those technologies to build more advanced military units without ever having to discover Gunpowder yourself.

STEALING KNOWLEDGES AND WONDERS OF THE WORLD

If a rival civilization is technologically ahead of yours and is developing a Wonder of the World that you wish to acquire, engage in a military attack and capture the city that is developing that Wonder. Once you have taken over the rival city, the Wonder (which was already in development) will continue to be built, but now it will belong to your civilization, even if you have not made the technological advances that would normally have been needed.



CHEATING TO LEARN

Playing Civilization can be especially fun when your strategies and leadership abilities prove to be successful. Providing yourself with a \$30,000 treasury increase—or using any of the other cheating techniques outlined in this chapter—will allow you to develop different types of Civilization experiences.

Experiment with different aspects of the game; you'll find your empire's capacity to grow is now almost limitless.

**USING THE
KEYBOARD
COMMANDS**

E L E V E N



Let's face it, with the popularity of Microsoft Windows and many graphics based software applications, the computer mouse has become an extremely popular and relatively inexpensive accessory. Despite this, there are still plenty of PC users (including those using laptops and notebooks) who do not have access to a computer mouse.

This chapter will explain how to play both the DOS and Windows versions of Civilization using the keyboard as the primary user interface between you and the game. (In the Windows version, keyboard commands do not replace all of the mouse functions.)

NOTE

The Windows keyboard commands are listed at the conclusion of this chapter.

DOS VERSION KEYBOARD COMMANDS

Unfortunately, if you will not be using a mouse when playing the DOS version, you're going to have to remember many more commands in order to accomplish what would be a simple point-and-click procedure using a mouse. The first portion of this chapter describes the keyboard commands for the DOS version of the game.

DOS

TIP

When you make menu selections from the Main Game screen's pull-down menus be sure to use just keyboard commands or just mouse clicks, not both.

MOVING AROUND THE MAIN GAME SCREEN

Since the Main Game screen is where a good portion of the game play takes place, you can quickly move around the main map area (in the center of the screen) by pressing the Tab key to generate the cursor, then



holding down the Shift key in conjunction with the directional arrow keys to move in whatever direction you wish. To activate a unit within this main map area, simply place the cursor on that unit and press ↵.

Accessing the City Screens

When you want to access the City screen for a specific city, place the cursor on that city's square icon and press ↵. The City screen for that city will then appear.

Accessing the Pull-Down Menus

The Main Game screen is where you have access to the game's various pull-down menus. The menu bar is located at the top of the game screen and offers the following options:

- Game
- Orders
- Advisors
- World
- Civilopedia

To access any of these pull-down menus without using a mouse, hold down the Alt key and simultaneously press the first letter of the menu option you wish to select. For example, press Alt+G for the Game pull-down menu or Alt+O for the Orders pull-down menu.

After accessing the specific pull-down menu, the available options will be displayed. Use the arrow keys on the keyboard (which are sometimes the same keys as the numeric keypad) to move the highlighted bar up or down the list of menu options. When the option you wish to choose is highlighted, press ↵. (On the numeric keypad, the 8 key is the up-arrow and the 2 key is the down-arrow.)



Fortifying Units, Making Them Sentries, and Activating Them Again

An active unit can be Fortified or placed on Sentry duty by accessing the Orders menu and selecting either of these two options, or simply by pressing **F** or **S**. To reactive a specific unit that is fortified or on Sentry duty,

- 1** Press **A** (for Activate) and use the directional arrow keys to move the cursor around the screen to select the unit you want to activate.
- 2** When the correct unit is selected, press **↵** to activate that unit.

CONTROLLING THE CITY SCREEN

In the City screens and in certain other areas of the game, there are graphic icons which activate certain game play options. To activate these icons without a mouse, press the first letter of the icon's name, as shown in Table 11.1.

TABLE 11.1: *City screen shortcut keys (DOS)*

KEY(S)	COMMAND
B	Buy
C	Change
H	Happy
I	Info
M	Map
P	People (creates elite citizens)
R	Rename
S	Sell a City Improvement
V	View



Creating Entertainers, Scientists, and Taxmen

Within the City screen is also where you assign specific members of the population jobs—for example, you assign jobs to regular workers, or you can make them into elite citizens—first Entertainers, then Taxmen, and finally Scientists. Normally, to convert a regular citizen into an elite, you would use the mouse to click on a wheat symbol (which symbolizes farmland and the farm people who work the land) found on the small map in the center of the City screen. When using just the keyboard commands,

- 1** Press **P** to activate the cursor, which will then appear in the map area.
- 2** Using the directional arrows on your keyboard, move the cursor to a wheat symbol on the map.
- 3** Press **↵** to convert a normal citizen into an Entertainer.

Once an Entertainer is created, it can then be transformed into a Taxman, then a Scientist, or back into a normal citizen. After creating the Entertainer, you will notice that the population roster in the upper-left portion of the City screen has changed—now it displays fewer regular citizens and one additional Entertainer.

To convert an Entertainer into a Taxman,

- 1** Going from left to right, count the number of people in the population roster and press the number on the keyboard that corresponds to the Entertainer you want to convert. If the Entertainer is the second citizen from the left, press **2**.
- 2** Press the same number a second time to convert that same citizen from a Taxman to a Scientist.

Selling City Improvements

In the upper-right corner of the City screen is the list of City Improvements the city has acquired or built. Next to each Improvement is a small circle icon—the Sell button for that Improvement. With a mouse,



you would click on this icon to sell the Improvement. To sell a listed City Improvement using the keyboard commands,

- 1** Press **S** to convert this listing into a standard menu with a highlighted bar.
- 2** Using the directional arrow keys, highlight the Improvement you wish to sell.
- 3** Press **↵**.
- 4** Next, a Yes/No dialog box will appear, which will also note the value of the Improvement you are looking to sell. If you select the Yes option (by pressing **Y**), the Improvement will disappear from the list and your civilization's treasury will increase accordingly. If you select the No option (by pressing **N**), the sale will not happen.

NOTE

If the word "More" appears at the end of the list of Improvements, indicating that the list is too long to fit in the window, press Shift+M (More) to see the rest of the list.

USING THE FUNCTION KEYS

Each of the function keys on the keyboard (F1 to F10) performs specific tasks within the simulation. Instead of accessing individual pull-down menus and then highlighting your specific choices, the function keys can save time and keystrokes. Table 11.2 lists the commands or features that can be activated using the function keys.

TABLE 11.2: *Function key commands and features (DOS)*

FUNCTION KEY	COMMAND
F1	City Status
F2	Military Advisor
F3	Intelligence Advisor
F4	Attitude Advisor

**TABLE 11.2:** *Function key commands and features (DOS) (continued)*

FUNCTION KEY	COMMAND
F5	Trade Advisor
F6	Science Advisor
F7	Wonders of the World (acquired)
F8	Top 5 Cities
F9	Current Civilization Score
F10	World Map

USING OTHER HELPFUL KEYBOARD COMMANDS

The following additional keyboard shortcuts can be helpful even if you're primarily relying on a mouse to interact with the game.

To center the main map around the currently active unit from the Main Game screen, press **C**.

To activate the cursor in the main map area, press the Tab key. Then you can use the directional arrow keys to move the cursor.

To quickly quit the game (without saving the game data), press Alt+Q.

To move the active unit, use the directional arrow keys.

Using the Keyboard to Give Orders

To tell your units what to do in Civilization, you issue *orders*. You can issue orders by accessing the Orders pull-down menu and selecting one of the choices, or you can use the keyboard shortcuts listed in Table 11.3.

**TABLE 11.3:** *Orders menu shortcut keys (DOS)*

KEY(S)	ORDER
General Orders	
F	Fortify
G	GoTo
H	Home City
S	Sentry Duty
U	Unload Ship
W	Wait
Shift+D	Disband a unit
Shift+P	Pillage
Spacebar	No Orders
Settlers Orders	
B	Found a New City (<i>or</i> adds Settlers to any established city)
F	Build Fortress
I	Agricultural Improvement
M	Industrial Improvement
P	Clear Pollution
R	Build Road/Railroad

Changing the Tax and Luxury Rates

You can change the Tax Rate or Luxury Rate during a simulation by accessing the Game pull-down menu and then selecting the Tax Rate or Luxury Rate menu choice.

An alternate method for quickly adjusting these rates is to press + to adjust the Tax Rate and – to adjust the Luxury Rate. A menu will appear



listing the various values to which the Tax or Luxury Rate can be adjusted. Use the directional arrows to highlight your choice and press ↵ to actually change the rate.

Making Tracks with the GoTo Command

The GoTo command is handy when you have a specific destination (across multiple squares) for a unit in mind, but it will take many turns to reach that location. Use the GoTo command so that you don't have to keep moving the unit manually as each turn passes. To use the GoTo option,

- 1** Activate the unit you wish to move.
- 2** Once the unit is flashing (active), press **G**. The active unit will continue to flash; however, the box cursor will appear.
- 3** Using the directional arrows, move the cursor to the location you ultimately want the active unit to reach.
- 4** With the cursor at the new location (the unit will remain in its original location) press ↵.

The computer will assist you by automatically determining the fastest route from the unit to its destination; as each turn passes, the computer will move the unit toward its destination over the maximum number of terrain squares allowable.

Saving Game Data Fast

If you have chosen to deactivate the AutoSave option or if you wish to save the game data at a specific point, you can either access the Game pull-down menu and select the appropriate option *or* you can press Shift+S to quickly save the game data without dealing with the menus.

WINDOWS VERSION KEYBOARD COMMANDS



All of the game menus in the Windows version of Civilization have been redesigned. To access any of these menus using keyboard commands, hold



down the Alt key in conjunction with the underlined letter of the menu option. Once a pull-down menu appears, you can either press the underlined letter that corresponds to the command you want to activate or you can use the arrow keys to move the cursor until the command you want is highlighted. Press ↵ to activate the highlighted command.

In the Windows version of the game, using the keyboard commands will speed up game play slightly; however, the mouse will still be necessary to accomplish certain tasks. Table 11.4 lists the most common Windows keyboard shortcuts.

TABLE 11.4: *Windows keyboard shortcuts*

KEY(S)	COMMAND
Getting Around the Main Game Screen	
J	Center the map on the active unit
T	Toggle units on/off
Arrow keys	Change menu highlight
↵, spacebar, or underlined letter	Choose menu option
Escape key (Esc)	Close menu, window, or screen
General Orders	
D	Disband active unit
G	GoTo
F	Fortify
H	Home City
P	Pillage
S or E	Sentry
U	Unload Ship
W	Wait
Spacebar or N	No Orders



TABLE 11.4: *Windows keyboard shortcuts (continued)*

KEY(S)	COMMAND
Settlers Orders	
B	Found New City (or adds Settlers to any established city)
F	Build Fortress
K	Clear Pollution
I	Agricultural Improvement
M	Industrial Improvement
R	Build Road/Railroad
Information Screens	
Ctrl+1	City Status
Ctrl+2	Military Advisor
Ctrl+3	Intelligence Advisor
Ctrl+4	Attitude Advisor
Ctrl+5	Trade Advisor
Ctrl+6	Science Advisor
Ctrl+7	Wonders of the World
Ctrl+8	Top Five Cities
Ctrl+9	Current Civilization Score
Ctrl+0	World Map (enlarged)
Ctrl+D	Demographics
Ctrl+F	Find City
Ctrl+P	Spaceship Exploration Status

**TABLE 11.4:** *Windows keyboard shortcuts (continued)*

KEY(S)	COMMAND
City Screen Commands	
Ctrl+A	Auto production
B	Buy unit/Improvement
C	Change production
H	Happiness Chart
I	General Information
R	Rename City
V	View City (graphic screen)
Miscellaneous Commands	
Ctrl+L	Change Luxury Rate
Ctrl+Q	Quit/End Game
Ctrl+R	Revolution
Ctrl+S	Save Game
Ctrl+T	Change Tax Rate

HIGH SCORIN'

CIVILIZATION FUN

T W E L V E



During a simulation, you can measure your progress in a number of ways—funds in your treasury, military conquests, scientific developments, or your point score. At any time during a game, you can access the Civilization Score option found under the World pull-down menu on the Main Game screen. The Civilization Score display will show you

- The total number of citizens in your tribe
- The Wonders of the World your tribe has obtained
- The number of bonus points you have received for each peaceful turn
- The total Civilization Score you have earned thus far

THE CIVILIZATION SCORE DISPLAY

The Civilization Score is made up of a number of components, which will be described in this chapter. Two typical score screens are shown in Figure 12.1.

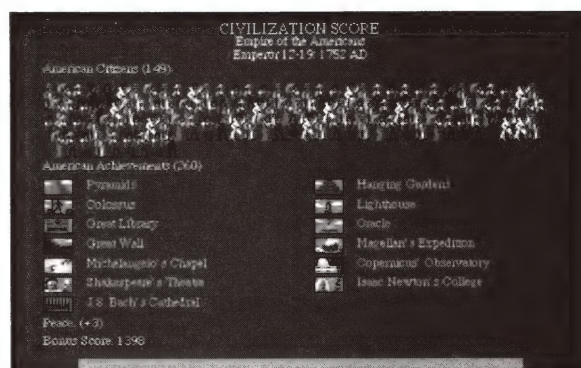
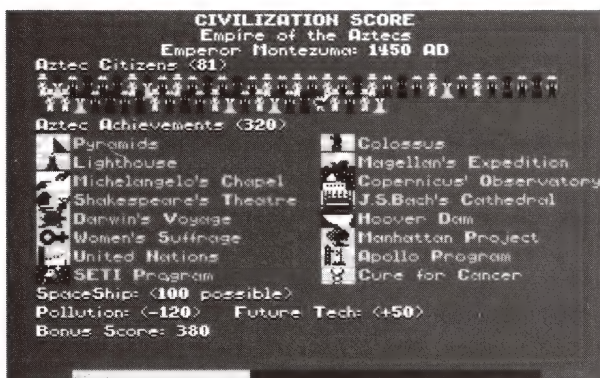


FIGURE 12.1 The Civilization Score screen at the end of a simulation in DOS (left) and Windows (right).



EARNING POINTS FOR THE SIZE AND HAPPINESS OF YOUR POPULATION

The first component is a count of your civilization's entire population, combined with award points based on the status of each citizen. You can expect to receive

2 points for each happy citizen

1 point for each content citizen

1 point for each elite citizen

SCORING FOR OBTAINING WONDERS OF THE WORLD

Next, the computer will evaluate the number of Wonders of the World your civilization has acquired and award you

20 points for each Wonder of the World

With twenty-one Wonders available, that's 420 points you can potentially earn.

GETTING EXTRA POINTS FOR PEACEFUL TURNS

You will also be awarded

3 points for each peaceful turn

A peaceful turn is one in which your civilization is not officially at war with any other civilization in the simulation. Later in the game, after you have conquered the majority of other civilizations and your empire is working toward colonizing space, you should be able to rack up a large number of peaceful turn points, since there will be few rival tribes remaining to fight.



OBTAINING FUTURE TECHNOLOGIES

In the very late stages of the game, there are a variety of Future Technologies available for your Scientists to acquire. You will receive

5 points for each Future Technology

GAINING POINTS THROUGH SPACE TRAVEL

Colonizing space is another way to build up points. Your empire will receive

50 points for every 10,000 space colonists who successfully arrive at Alpha Centauri

There's also a Space Travel Bonus, which is based on the number of colonists that land on Alpha Centauri compared to the initial Probability of Success (which was displayed when the spaceship was launched). The Space Bonus formula is points received for the number of colonists that landed multiplied by the Probability of Success of the mission.

Thus, if 40,000 colonists reach Alpha Centauri, you receive 200 points. Those 200 points multiplied by a 90% Probability of Success rating results in a Space Travel Bonus of 180 points ($200 \times .9 = 180$).

LOSING POINTS THROUGH POLLUTION

While colonizing space can be a great booster of points, not being able to control pollution back on your home planet can cause serious point penalties. When your score is tabulated, you will get

-10 points for each terrain square containing pollution



Dealing with Pollution

The only way to clean up a polluted terrain square is with a group of Settlers. Move the Settlers onto the polluted square and select the Clear Pollution option (press **P** in DOS or **K** in Windows) from the Orders pull-down menu. It will take four turns for Settlers to clean up a polluted square. Until the pollution is cleaned up, food production for that square will decrease. Building a Recycling Center, Hydro Plant, Mass Transit, Nuclear Power Plant, and/or the Hoover Dam Wonder of the World will also help to reduce the risk of pollution within a city.

A polluted city will contain a Pollution icon in the Information window of its City screen, as shown in Figure 12.2. Another way to tell if a city has pollution is the Clear Pollution option in the Orders menu. If there is no pollution, the option will not highlight and cannot be selected; if there is, the option *can* be selected.



FIGURE 12.2 Notice the Pollution icon within the Information window of this City screen (DOS version shown).



Causes of Pollution

There are several causes of pollution, all of which begin to come into play in the middle and later stages of a simulation. Factories and Manufacturing Plants are two pollution builders, as are nuclear weapons. Cities with large populations that have developed the Automobile are at very high risk for pollution (to cut down the problem, build Mass Transit). If you are using a Nuclear Plant to power a city, make absolutely sure that your population is a happy one; unhappy people can lead to civil disorder, which can in turn cause nuclear meltdown—the worst form of pollution.

NOTE

If pollution is not controlled within your empire and nine or more terrain squares become polluted, your entire planet will begin to experience the effects of global warming. These effects may result in a change of terrain squares from Grasslands and Plains to Swamps (or worse).

SOME STRATEGIES FOR BUILDING POINTS

You can take advantage of some of the scoring rules to build a higher score by keeping in mind the strategies presented here.

BUILDING POINTS NEAR THE END OF THE GAME

The best time to earn plenty of points is in the final stages of the game. When your empire is about to defeat its final rival on the planet, build up your military forces near that final foe but don't attack yet. At the same time, cut taxes dramatically and increase the Luxury Rate.

Now, wait a few turns for these changes to take place. Adjusting the Tax Rate and Luxury Rate in the final turns of the game will convert unhappy or content citizens into happy citizens and earn you extra points. Once this has happened, go ahead and finish off the remaining rival civilization.



BUILDING POINTS BY KEEPING THE POPULATION HAPPY

Another strategy is to try to keep as much of your population as happy as possible throughout the simulation by building those City Improvements and Wonders of the World that boost happiness. Thus, at the end of the game, when the final point score is about to be tabulated, you won't have to do a lot of catch-up work to win the hearts of your population and earn those two points per happy citizen.

BUILDING FUTURE TECHNOLOGIES

Yet another strategy can be implemented once you assign your Scientists to develop Future Technologies. Since each Future Technology is worth five points, you can increase your scientific efforts by adjusting the Tax Rate to 80% Science—or 90%, or even 100%—and allow these Future Technology Advances to be created quickly before the simulation ends.

GETTING BONUS POINTS FOR CONQUERING THE WORLD

If you manage to build a military strong enough to overcome all of the rival empires on your planet, you will receive a 1,000-point bonus for conquering the world and becoming the world leader by A.D. 2000.

In addition, you'll earn two more points per turn if you conquer the world *before* A.D. 2000; however, you'll lose two points per turn if you conquer the world *after* A.D. 2000, so if your goal is world domination, it's a good idea to achieve that as soon as possible.

Overall, at the end of a simulation, your goal is to earn over 1,000 points; however, the higher the score, the better. Thus, if you manage to colonize space *and* conquer the world, chances are you'll receive a very respectable final score.



COMPARING YOUR SUCCESS TO THAT OF YOUR RIVALS

Following the Civilization Score screen at the end of the simulation, you will see a chart that compares your success (or failure) to that of the rival civilizations on your planet. Along the bottom of the chart is a time-line; each civilization's progress through the years is displayed in the form of a line graph, as shown in Figure 12.3.

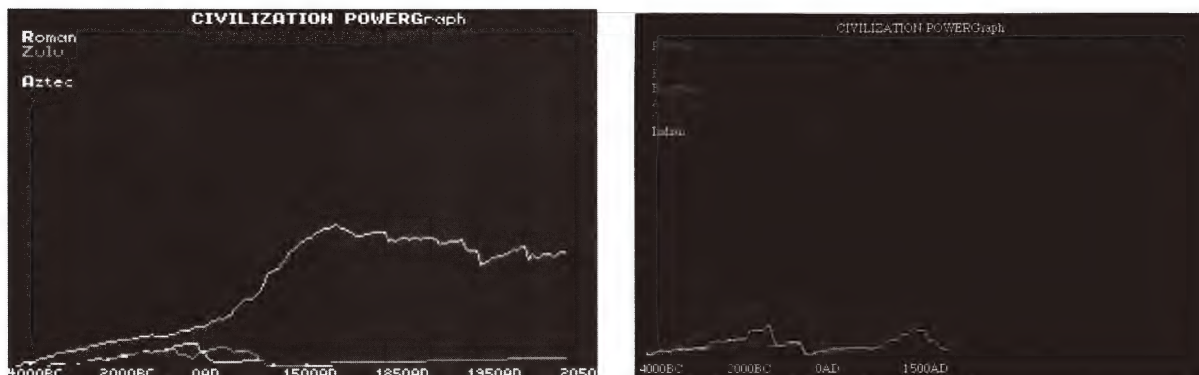


FIGURE 12.3 A line graph compares your success to that of other civilizations within the simulation. The left screen, in DOS, shows a game with few rival civilizations, while the right screen, in Windows, shows a game with many rivals.

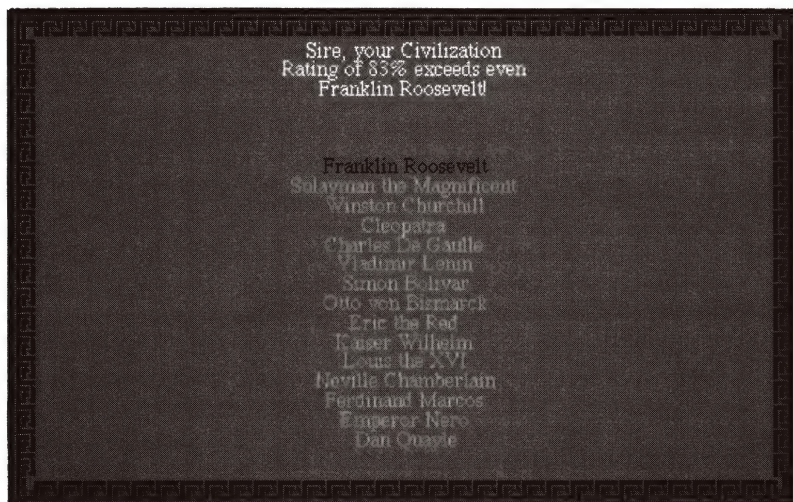
COMPARING YOUR SUCCESS TO HISTORICAL LEADERS

Next, you'll see a screen comparing your overall performance to that of well-known, real-life world leaders. Based on your score and the skill level you choose, you could be rated as a leader equivalent to Dan Quayle (the worst possible rating *and* a total insult in Sid Meier's eyes) or to Solomon the Wise (the highest possible rating). Beginning with the worst rating and moving up the scale, you might be compared to

- Dan Quayle
- Emperor Nero
- Ferdinand Marcos



- Neville Chamberlain
- Louis XVI
- Kaiser Wilhelm
- Eric the Red
- Otto von Bismarck
- Simon Bolivar
- Vladimir Lenin
- Charles de Gaulle
- Cleopatra
- Winston Churchill
- Sulayman the Magnificent
- Franklin Roosevelt
- Shogun Tokugawa
- Thomas Jefferson
- King Charlemagne
- Emperor Augustus
- Solomon the Wise



Being compared to Solomon the Wise at the end of a simulation is extremely difficult. Just because you conquered the planet or colonized space, it doesn't mean you will be compared with the great leaders. How you manage your civilization during the simulation has a major impact on your final score and performance rating.



A FEW LAST WORDS

Your Civilization score is just another aspect of the game that makes it a challenge. Even after you have developed your own strategies for conquering the world and/or colonizing Alpha Centauri, you can always attempt to discover new strategies to increase your overall point score (without cheating).

Initially, Civilization may seem like an extremely complex and confusing game that takes brain power and time to complete; whatever you do, don't give up and throw the software package into the closet! Instead, spend an hour or two tinkering with a trial-run simulation. If you use your imagination along with your ability to define strategies, chances are you will become captivated by Civilization's challenge and originality.

It's no accident that Civilization has won numerous awards within the software industry. Game Player's *PC Entertainment* magazine said it best when they first reviewed the game: "Civilization is one of the most novel and entertaining strategy games we've ever seen. The interface is friendly and practical, and the game is sprinkled with delightful graphics and a fine sense of humor. It has all the makings of a classic!"

If you enjoy strategy games that are designed to challenge your mind rather than your fast reflexes, you've made an excellent choice in Civilization. Once you've mastered this game, you might want to check out Sid Meier's Railroad Tycoon (another of MicroProse's best-sellers).

SimCity 2000, SimFarm, SimEarth, SimAnt, and SimLife are also superior simulation programs (from Maxis), as are Populous and Populous II (from Electronic Arts).

Caesar (from Impressions Software) is another alternative if you're looking for an entertaining software package that allows you to build cities and manage a population.



LET THE GAMES GO ON

Computers are excellent for word processing and number crunching; however, if you want to spend a few relaxing hours challenging your mind, they can also be an excellent entertainment medium, presenting the work of software developers who are as creative as motion picture producers.

We're living in a wonderful high-tech era. Let the games begin...and may all of your game scores be high!

THE INSIDE

SCOOP

A P P E N D I X A



A P P E N D I X A

Sid Meier, the co-founder of MicroProse Software, is the man behind Civilization's creation and success. Sid has made a career of creative computer game design, with innovative new ideas for improving the overall quality of interactive games. From his office in Hunt Valley, Maryland, Sid spent a few minutes talking about himself and his game, Civilization.

NOTE

Civilization has recently been adapted to the Windows format. An interview with William Denman, Jr., president and chief engineer of ShadowMasters (the company that adapted the game to Windows), follows the Sid Meier interview.

CREATING CIVILIZATION: AN INTERVIEW WITH SID MEIER

Question: *How did you get involved in the computer game business?*

SID MEIER: Well, I studied computers in college and started with a more mainstream computing job. Shortly after that, personal computers came out, which gave me a chance to combine computers—which was my job—with my fascination for games, which I have enjoyed playing since I was a kid. I started to write computer games for fun on the Atari 800 computer—that led to writing games for commercial distribution. A bit later, my partner and I founded MicroProse Software.

Q: *How did the idea for Civilization evolve?*

MEIER: We created Railroad Tycoon previously and liked the way its features turned out. The concept in that game was to build and maintain a working railroad system. You started with a little seed and built it into something much bigger. Railroad Tycoon allowed excellent interaction between the various elements of the game—you had to wear a number of



different hats while playing. For example, you had to build stuff, operate what you built, and finance it. Whatever you did in one area of the game influenced the other areas, so you were always kept occupied.

When we finished *Railroad Tycoon*, we started looking for other game ideas with these qualities. We looked at existing games—like *Empire*, *SimCity*, and *Populous*—and figured out what we would have done differently to make these popular games better.

Between what we learned from *Railroad Tycoon* and from evaluating other games, we came up with the concept for a game that involved conquering the world and journeying through time. We put together a prototype, and from the early stages, *Civilization* was fun to play.

Q: *How long did it take to create Civilization?*

MEIER: At MicroProse, our development methodology is to quickly put together a model so we obtain the general feel for the game, then go back and add more and more stuff as we play the model and discover what we like and don't like about it. *Civilization* was one of the few games that turned out pretty much as we originally envisioned it. The actual development process took just under three years, but we took a break during that time to finish *Covert Action*. The whole process took about a year and a half.

Most of the time, it was co-producer Bruce Shelley and myself working on the game. Towards the end, we had about fifteen artists and musicians adding their talents to the original PC version of *Civilization*.

Q: *How much previous historical knowledge is required to play Civilization?*

MEIER: Very little. We did some historical research, but we tried to use knowledge that we already had. We relied on the assumption that people who played the game would have similar basic historical knowledge. We didn't want to create a game that depended on learning a lot of historical background information from the game's manual or another book. A game based on a lot of research or on a lot of knowledge will only appeal to a small group of people—or historians.



Q: *What was the biggest obstacle you had to overcome in creating Civilization?*

MEIER: It took us a while to find the right approach. Early on, Civilization had a more SimCity [Maxis Software] approach, where some things happened automatically. This method didn't give the player enough control, so we went with using different types of units [*Editor's Note: In Civilization, all active members of the population—Settlers, Diplomats, etc.—are represented as individual graphic icons, called units*] which the player could create and then manage. Initially, the map structure of Civilization was much bigger, and the time units were smaller, which made the entire game somewhat overwhelming.

We then had to modify the game and figure out what a reasonable amount of game play time for Civilization was. We also had to balance the military, political, and economic systems. Originally, the military aspect of the game was dominant.

Q: *How long should a typical simulation take?*

MEIER: We figure that you'll want to accomplish quite a bit in an evening, and that most people aren't going to spend more than three or four evenings at a time playing out a simulation.

Based on this, we created a game in which each simulation takes between ten and twenty hours to complete. Of course, how long a simulation takes is based upon how well you play and what developments take place.

Q: *How did you select the various Advancements and City Improvements that are incorporated into the game?*

MEIER: The important thing about this aspect of the game is that each Advancement or City Improvement leads to the creation of something else you can use.

Early on in the game's development, I picked out about fifty things I thought would make good icons to represent progress during the game. As it turns out, we used many of the Advancements and City Improvements that were on my original list.

When you pick an Advancement or City Improvement, it offers a specific benefit to your civilization. By selecting what technologies you go after, you can steer your civilization toward whatever your goals happen to be.



Q: *What key elements do you feel make up a good game?*

MEIER: There are a couple of things we do to ensure that we produce good games. First, we play our own games continuously throughout the development process. If we're not having fun playing a game that is in development, we fix it as early as possible.

We also make sure that it's not just the game's designer who is having fun, or simply that the computer is showing off its graphics capabilities. The player is the central character, and we take every step possible to ensure that the game is designed for the player. The player should be totally involved in the game.

Q: *What would you say is the most difficult part of playing Civilization?*

MEIER: I'd have to say that Civilization is one of the few games for which the learning curve is pretty good. The game starts out easy and gradually gives you more and more to do.

In Civilization, you must spend some time early on learning the interface and where certain pieces of information are. It is important that you understand the general idea of the game, which is that you must build and expand your civilization from the beginning.

If you start the game and just wander around to see what happens, not too much will happen. This type of game depends on you, the player, to make things happen. You are the star, and you must build cities and create a civilization, with the idea that bigger is better.

Q: *What should first-time Civilization players be on the lookout for?*

MEIER: Once again, the key is to explore. Beyond the idea of building cities and expanding, I think we really want you to try achieving different goals each time you play. Try being a military leader one time and a peaceful leader the next time. Perhaps you'll attempt to build a civilization that is an economic superpower, or extremely advanced, by making your goal to achieve as many Advancements and technologies as possible.

The first time you play, definitely select the Chieftain [beginner] level. Other than that, play Civilization the way you want to play, and define your own goals. Be creative and have fun with your exploration.



Q: *Do you have any other advice?*

MEIER: I would suggest that the first time you play, you should sit down with someone else who has already played Civilization and understands how the game works. At any time, it is always fun to play with someone else so that you can discuss things as you go.

This game does not have a right way or a wrong way to play it. Don't be afraid to try things. If your civilization is ruthlessly crushed, re-boot the computer and start again.

CREATING A WINDOWS VERSION OF CIVILIZATION: AN INTERVIEW WITH WILLIAM DENMAN, JR.

When MicroProse software decided to adapt its best-selling, DOS-based Civilization game to the Windows operating system, the company contracted a small, North Carolina-based company called ShadowMasters to adapt the software. As president and chief engineer of ShadowMasters, William Denman, Jr. has been doing work for MicroProse since 1985. Shortly after the Windows version of Civilization was completed, William shared his thoughts about the game.

Question: *What major changes have been made to the game in the Windows version?*

WILLIAM DENMAN, JR.: The game play is exactly the same; however, the programming code is much more stable. The main thing is that all of the art is now high-resolution. We took full advantage of Super VGA graphics capabilities. Another major change is that the main game screen is divided up into separate windows. You can make the big map screen fill the entire monitor. If you have a 21-inch monitor, you can see almost the entire world. We worked with Sid [Meier] on this version, but we didn't change the actual game play. In addition to the graphics, we also improved the sound dramatically, and we now allow for an unlimited number of saved games.



Q: *Why is the Windows version of the program slower? Can anything be done to speed the game up?*

DENMAN: There is a software upgrade for the Windows edition in the works that will speed up the game a lot. The speed of a Windows program is limited by the speed of the graphics board within a computer. Microsoft doesn't write graphics drivers. The companies that manufacture the graphics boards create their own drivers. Having a fast CPU speed also helps, but the speed of the game is limited by the graphics board. To speed up the game, players can keep the main map window small on the computer screen. Keep in mind, in between each turn, the computer has to manipulate four times the number of pixels on the screen that the DOS version of the game does. If you find that the Windows version runs slower on your PC than the DOS version, it's not our fault. We're doing everything possible to speed up the game.

Q: *Other than small software upgrades, can players expect to see a new version of Civilization or a sequel in the future?*

DENMAN: Yes. I don't know how much I'm allowed to say about the new game or games. In the next version of Civilization, we are planning to improve the look of the game and some basic game play features, but the overall game play will remain the same. When we add the communications capabilities for a multi-user version of the game, which I am not willing to confirm or deny, since this feature has not yet been announced, this new feature will make the Civilization game more exciting and competitive. I *will* say that in addition to a new version of Civilization for Windows, there is also a sequel in the works.

Q: *What did it take to adapt Civilization for Windows?*

DENMAN: It took between two and three people working full-time for eighteen months to adapt the game to the Windows operating system. Obviously, it is easier to take an existing game and adapt it to another interface; however, it is still a lot of work.



Q: *Could you tell us more about the new sound enhancements made to the Windows version of the game?*

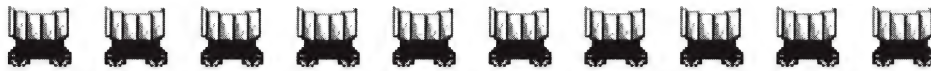
DENMAN: We have taken advantage of the sound drivers of Windows to improve the sound effects and music included in the game. Unofficially, if a player wants to create their own sound effects for the game, they can create their own .WAV files using any Windows-based sound editor. Some of the people on our programming team have substituted the sound effects that come with the game with sounds from the *Beavis and Butthead* cartoon on MTV. You can have a lot of fun editing the sound files, but make sure you don't make the files too large or they'll take up too much memory and won't load correctly when you play the game.

Q: *Is it possible to cheat in the Windows version?*

DENMAN: Nope. For the DOS version there are some game editors and cheat editors that players have created. These programs won't work as is on the Windows version. When the Windows version of Civilization saves a game file, it does some file compression, so if you want to edit the game save files to give yourself a huge budget, you'll have to discover how to uncompress and then edit the saved game files. In this version, we have also taken out all of the built-in cheat codes that were featured in the first several versions of the DOS edition. We took out the cheat codes because they weren't necessary for us to debug the game, and we didn't realize that players might want to cheat.

**AVOIDING
BUGS AND
PROBLEMS—
DOS VERSION**

A P P E N D I X B



A P P E N D I X B

Civilization is a complex computer program—and, like many programs, it contains a few *bugs* (errors in the programming). The new Windows version of Civilization is relatively bug-free (although a few do exist—contact MicroProse Software directly for details), but the DOS version still has a few problems and bugs that we’ll discuss in this chapter.

THE “HANGING” BUG IN EARLY VERSIONS OF CIVILIZATION

The most obvious bug in Civilization versions 1, 2, and 3 sometimes occurs in the midst of a simulation and causes the computer to *hang* (which means it just stops—you can’t save the game data, and you must *reboot*, or restart the computer). This bug often takes effect when the City screen is displayed and you attempt to use the Change option.

To avoid some of the problems hanging can cause, an excellent strategy is to leave the AutoSave option activated *and* to perform a manual save whenever an important event takes place.

The good news is that the programmers at MicroProse Software have been hard at work attempting to fix this bug. But since the bug has not totally been fixed as of the official release of Civilization 4, the easiest way to work around it is to deactivate the Instant Advisor option found in the Options submenu under the Game pull-down menu. This should stop the game from hanging.

THE BUG FIX IN VERSION 5

Version 5 of Civilization attempts to fix this bug. Like previous upgrades, version 5 is available for downloading, free of charge, from the various on-line services.

DOS



From CompuServe, Prodigy, America Online, or the MicroProse BBS, download the file CIVV05.ZIP (and, if necessary, a decompression utility such as PKUnzip). Version 5 of Civilization is supposed to include a fix for that pesky bug in the program; however, game players continue to report mixed results.

As you search the on-line services or contact MicroProse Software for updates, be sure to check the date(s) of the updates to insure you have the latest revisions and bug fixes.

ONE LAST BUG AT THE END

One other bug occurs at the end of the simulation, when you are given the option of ending the program or of continuing to play without the computer keeping score. If you choose to keep playing, do not access the Civilization Score option, because activating this option could cause the computer to freeze.

To unfreeze the game, try double-clicking the mouse in the Palace area on the left side of the Main Game screen. This usually works, but not always. You may have to reboot the computer in order to continue.

DON'T RUN CIVILIZATION WITH MEMORY-RESIDENT PROGRAMS

In addition to the bug already discussed, players have found that Civilization does not work on a computer that is running a memory-resident program (for example, SideKick). When you start Civilization with a memory-resident program already running (or when you start a memory-resident program with Civilization already running), there is a possibility that both programs will crash, meaning you'll have to reboot the computer and choose to run either Civilization or the other program.



PAY ATTENTION TO SYSTEM REQUIREMENTS

Additionally, you should pay attention to the memory requirements listed on the game's packaging—a minimum amount of 640K RAM (random access memory) is required. If you are running the program in VGA graphics mode with Sound Blaster drivers and the mouse driver, you're going to require a lot more RAM. If you don't have enough RAM, an error message will appear on-screen following the game's title screen. Often, you will be able to continue; however, there is a strong possibility that the game's graphic displays will be incomplete. Running the program in EGA mode requires less memory. You can also opt not to use a sound driver and/or the mouse driver and thus require less memory.

STAY OUT OF TURBO MODE

If you have the proper system configuration to run Civilization and the game still fails to load or run correctly, contact your local computer software dealer or MicroProse's Technical Support Department. The telephone number is listed in the game's original manual.

Note to the reader: Throughout this index, **boldfaced** page numbers indicate definitions and principal discussions of primary topics and subtopics. *Italicized* page numbers indicate illustrations.

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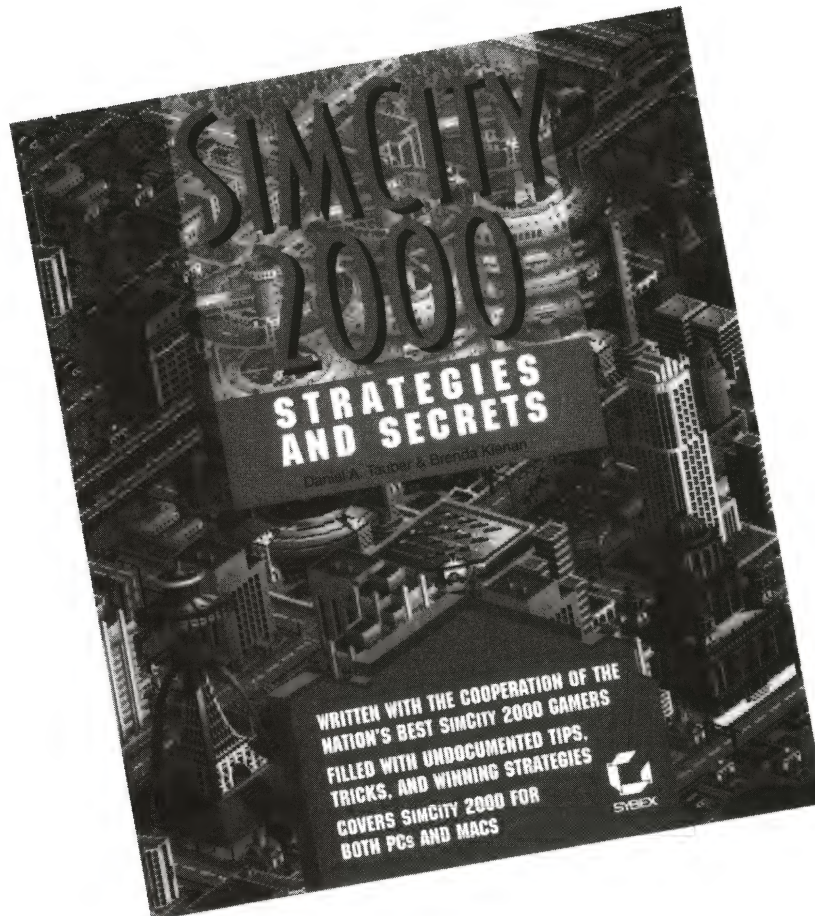
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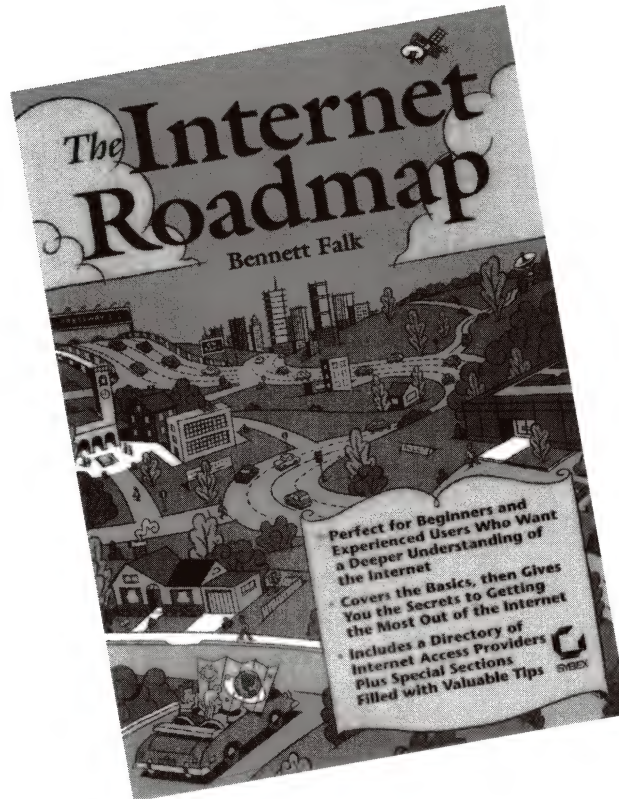
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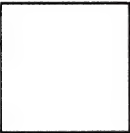
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MILITARY UNITS

DOS Icon	Windows Icon	Unit	Attack Strength	Defense Strength	Movement Rating	Resource Cost	Advance Required
		Armor	10	5	3	80	Automobile
		Artillery	12	2	2	60	Robotics
		Battleship	18	12	4	160	Steel
		Bomber	12	1	8	120	Advanced Flight
		Cannon	8	1	1	40	Metallurgy
		Carrier	1	12	5	160	Advanced Flight
		Catapult	6	1	1	40	Mathematics
		Cavalry	2	1	2	20	Horseback Riding
		Chariot	4	1	2	40	The Wheel
		Cruiser	6	6	6	80	Combustion
		Fighter	3	3	10	60	Flight
		Frigate	2	2	3	40	Magnetism
		Ironclad	4	4	4	60	Steam Engine
		Knights	4	2	2	40	Chivalry
		Legion	3	1	1	20	Iron Working

DOS Icon	Windows Icon	Unit	Attack Strength	Defense Strength	Movement Rating	Resource Cost	Advance Required
		Mechanized Infantry	6	6	3	50	Labor Union
		Militia	1	1	1	10	None
		Musketeers	2	3	1	30	Gunpowder
		Nuclear	99	0	16	160	Rocketry and Nuclear Fission
		Phalanx	1	2	1	20	Bronze Working
		Riflemen	3	5	1	30	Conscription
		Sail	1	1	3	40	Navigation
		Submarine	8	2	3	50	Mass Production
		Transport	0	3	4	50	Industrialization
		Trireme	1	0	3	40	Map Making

Note: The Defense Strength of a military unit of certain types (such as Militia, Phalanx, and Chariot) increases by 50% when the unit enters Veteran Status (i.e., after it has won a battle). Another way to gain Veteran Status is to build a Barracks City Improvement; while this won't affect existing units, any unit built after the Barracks automatically has Veteran Status.

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ABOUT THE AUTHOR

Jason R. Rich is a computer and video game expert who writes extensively for several national magazines, including *Disney Adventures*, *Game Player's*, *PLAY*, *Take One*, and *Wizard*. He is the author of nine books on various video games, the president of Teen Talk Communications, and the co-host/co-producer of the Peabody Award-winning *Kid Company* radio show.



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